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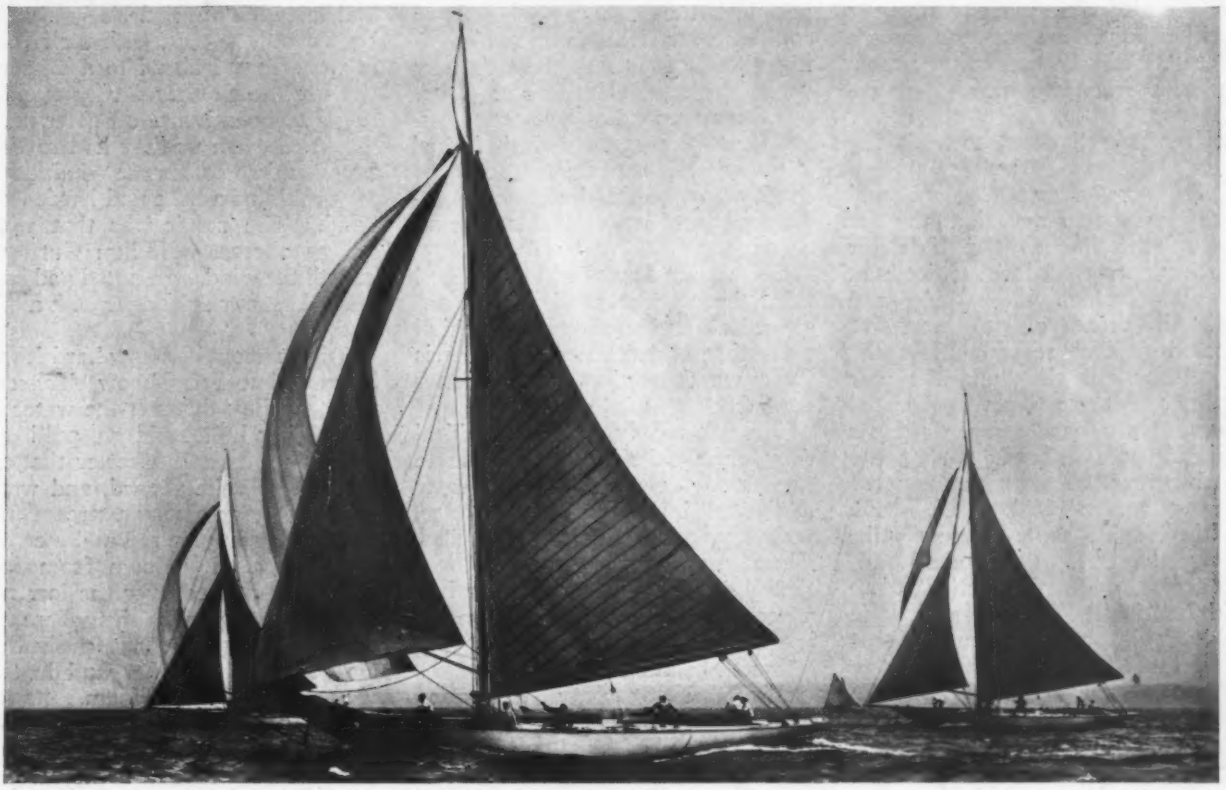


Breaking out spinnakers on the Forty-Footers as they cross the line

Two of the Larchmont "O" Class in a hot brush. No. 1, *Georgia*, J. F. Mahlstedt; No. 4, *Grey Dawn*, P. H. Johnson

Racing on a Forty-Footer

By C. G. DAVIS

SOME thirty odd years ago, Chas. H. Tweed brought from England a forty-foot cutter called the *Minerva* and with Capt. Charlie Barr sailing her she put up a fight against all comers that makes the name *Minerva* one that all old yachtsmen respect. Such famous designers as Burgess, Gardner, Mumm, and Wintringham built a whole fleet of "forties" to try to get the best of this beautifully proportioned cutter, but it was not until Burgess had built half a dozen or more that *Minerva's* superiority was even in doubt.

I had the honor of being one of the racing crew on the Gardner cutter *Liris*, a long legged, big displacement craft with an enormous rig, and in her saw considerable of this forty-foot class racing. So, when Frank Strachan invited me, last Summer, to make the New York Yacht Club cruise with him on the *Monsoon*, a modern forty-foot class sloop, one of many designed and built by Herreshoff, I gladly accepted.

Monsoon towed around from City Island behind her tender, the big power boat *Dixie*, and anchored at the rendezvous off Glen Cove on July 26, just after sundown, where I joined her. The following day, the first of the port-to-port runs, dawned warm and hazy and there was little or no wind when the flagship *Corsair* signalled the harbor start at nine o'clock. The sailing fleet consisted of nine schooners, varying in size from the big class C yachts, *Sonnica*, *Vagrant*, and the like, to the tiny sea-going *Sea Scamp* and *Sea Farer*. The big "fifties" were, of course, the main attraction in the single sticker division, and royal racing did they provide, as there were generally six of them starting; but the frolicking, fighting "forties" afforded just as good fun and generally put up as good a race as their larger sisters, six or seven starting as a rule each day.

Seven of the little "thirties" started and hung on well until the wicked conditions met with on the Block Island run discouraged them. Then there were several O boats, one N boat, and during the cruise others joined the fleet while some dropped out.

The first day's race was from Glen Cove to New Haven, a 38-mile run from the starting line between the Matinicock buoy and the flagship to the finishing line off the westerly breakwater light at Morris Cove. As usual, there were a hundred and one things to be attended to the first morning. The *Dixie* had just been purchased by Mr. Strachan and had been put into commission hurriedly. The stove wouldn't burn and Noggi, the Jap steward, was frantic; breakfast was late; sails and spars had to be transferred to the *Monsoon*, so, after most of the yachts had gone drifting down with the ebb tide toward the starting line, we hove up and after

getting aboard *Monsoon* passed a towline and had *Dixie* tow us out.

There was only a suspicion of a breeze from the south of west and Long Island Sound was as smooth as a mill pond.

The schooners had started and the "fifties" were maneuvering for position before we got near enough to feel safe. We had cast off from our tow, when we heard the preparatory whistle, and our headway carried us well down towards the line.

Pauline, Squaw, Shawara and *Pampero* were bunched at the far end of the line as our time for starting narrowed down to seconds, so with balloon jib pulling and mainsail broad off to port we crossed several seconds after the signal for our class and the race was on. All our rivals were ahead of us. One, the *Pauline,* jibed her mainsail to starboard and stood north across the Sound, as most of the schooners had done. The "fifties" split, some hugging the Long Island shore and some standing across for the Connecticut shore and the "forties" did the same. We held a mid-Sound position; not that we wanted to, but by the time we got there it was such a flat calm that we had no alternative.

Monsoon drifted dead before a westerly air, a boiling hot sun made the decks uncomfortably hot, and we set and shifted spinnaker until all hands were disgusted. The hands of the clock went round the dial a couple of times and no relief came. *Pauline* had disappeared in the haze up under the north shore. *Squaw* had hauled across our stern in that direction. The fifty-footer *Acushla,* with her tall sails, found air enough to crawl out from under our bows and go for the north shore but we, and some of the boats astern of us, were in the doldrums. Some of our class were away to the south'ard and about mid-afternoon we had the pleasure of seeing an air hit in close to the Long Island shore and start that fleet moving and of seeing the boats up under the Connecticut shore catch an overshoot of the same southwesterly air and go moving along the beach.

By the time we finally felt this new wind we figured we were hopelessly beaten. But a race is never won until it's over, so when we felt a breath of air we trimmed sail and with wind on starboard quarter started moving through the water, gaining speed as the air hardened until we had a nice brisk sailing breeze.

Pampero and *Shawara* were abeam to the south'ard and we were running neck and neck with them; but what had happened in the haze to leeward, we could only surmise by the way the *Acushla* over there was leaving us astern.

However, about an hour before we finished, all doubts were dispelled as the haze cleared and we could see our rivals to leeward pulling ahead of us. And that's how we finished. *Pauline* first at 3:10:03, *Squaw* second at 3:18:40, *Monsoon* at 3:20:33, having forged ahead of the boats that were to the south of us. Behind us came *Pampero* at 3:26:37 and *Shawara* at 4:00:53.

So on our first day we finished third, but as we luffed up and anchored alongside our tender behind the stone breakwater in Morris Cove we determined to do better next day.

Thursday, July 28, was an ideal day for a yacht race. Our course was from New Haven breakwater to the bell buoy off Sarah's Ledge, New London, a distance of 39 miles. That we sailed this distance in less than five hours proves that we had a good breeze, and it was from the southwest which made it an easy sail with ballooners.

Monsoon got away to a good start when our signal was given at 9:50 a. m. and with balloon jib pulling hard and mainsail with a sprit-topsail set over it broad off, we led the "forties." Two were trying to luff out and get our wind, one was astern and two on our lee quarter. But there was wind enough for all just then and no yacht could gain any advantage over another, so the two windward boats elected to stand diagonally over toward Long Island.

Pampero tried the same tactics as *Pauline* did the day before, and bore away for the Connecticut shore, followed by *Shawara.*

The instructions required us to keep south of Cornfield Lightship and also Bartletts Reef Lightship, so we held a true course with a couple of little O class boats trailing us for miles before we could leave them. Off Faulkner's Island we could see a fifty-footer and our rival forty all but becalmed down there, and ahead, also, was a freak wind condition. There was an area of calm water from mid Sound to the Connecticut shore, while from there to the Long Island shore the wind was harder the farther south one looked. The big, black yawl *Paladin,* dead ahead of us, was all but becalmed and trying to beat out to the south'ard. *Sally Ann,* who had been running even with us under our lee, saw this danger and started to luff us, and did manage to get ahead. We two ran out to the southward where the *Pauline* was traveling along by herself in a hard wind followed by *Squaw.* We came up just ahead of the former and all three started a luffing match, so we, on *Monsoon,* bore off quickly and left *Pauline* and *Sally Ann* to fight it out, so that, with their fooling, we footed ahead to a substantial lead when they finally decided to get busy and bore off after us.

But to catch us they had to bear away, and so soften the wind, while we could luff a little and harden the wind. The result was that when we go abreast of Plum Gut we had all the wind we wanted and bore off and set our spinnaker with a nice lead.

I don't know just how hard it was blowing but I do know *Monsoon* was traveling through the water as fast as her hull could go, pulling a comber up on each quarter that occasionally broke aboard, and water from aft was pouring a stream forward along her lee rail and meeting a stream coming down from forward that poured over the low rail into a vacuum amidships where the yacht's full bodied bows pushed all the water clear of her hull in two big rolling waves of foam.

We had rigged a topmast backstay and had the hooks of the tackle blocks well moused so they would not straighten out with the strain. It was well we did, for as we got farther to leeward and could see the *Corsair* marking the finish line ahead of us, we ran into a tide-rip that set the big *Monsoon* jumping like a hurdle jumper. How she did lift and jump! Everything was hissing white suds for yards about her and careful stick work was required to keep her from broaching as she rolled and sent her main boom heavenward one minute and her spinnaker soaring the next. We were logging a good ten knots and had both our nearest competitors well astern. It was only a question of keeping the stick in her and while some of us were discussing the advisability of taking in the spinnaker the *Pauline,* astern, broke her topmast, and down ahead of her on the water, like two great balloons, settled her spinnaker to starboard and her balloon jib to port while her topsail hung flat against her mainsail like a broken wing.

What surprised me was the way the spinnaker carried along, bellied out full of wind, for a good minute after the mast went, before it flattened down on the water and was dragged aboard by her crew. The upper end of the peak halyard let go, being made fast at the topmast

The New York Yacht Club fleet leaving New London and drifting out to the starting line off Sarah's Ledge for the run to Block Island. From a photograph taken by the Fairchild Aerial Camera Corporation

head, and slacked down the peak of the mainsail a little, but she never luffed to clear away but came gamely on to the finish.

A moment later the cry, "There goes the yawl's topmast!" drew all eyes to the *Paladin* that we had passed and was now off on our port quarter. Down came an immense balloon jib with the topsail and wreckage as the big, black yawl luffed up into the wind to save her sail that was overboard. A moment later we saw the spinnaker boom on the *Squaw,* astern and to port of the *Pauline,* snap in two like a pipe stem. Oh! boy! there was some excitement out there in that little jumpy tide-rip, but *Monsoon* came on through it all like a tea clipper in trade winds and never parted a rope yarn, winning in the forty class.

Squaw overhauled and passed the crippled *Pauline* and finished second. *Sally Ann* nearly caught *Pauline,* before the latter with her wrecked gear finished.

Rather than crowd in on the limited accommodations of the *Dixie,* young Frank Strachan and I elected to sleep aboard the *Monsoon* as she had four, large, spacious bunks, though we went aboard the motor boat for our meals. Soon after six o'clock the next morning I awoke, when the alarm clock forward roused out the crew, who were soon sloshing water about overhead as they washed down decks, followed by the thump of the squilgees. I could hear the man who sells New York papers rowing about in his skiff calling "New York and Boston papers!" could hear the cook start his galley fire, and then the smell of fresh cooked grub was too much for me. I got up and had a cup of hot coffee.

When young Frank was up and dressed we went aboard the *Dixie* and all hands, "Bob" Bavier, Will and Frank Strachan and we two had a swim, followed by one of Noggi's famous breakfasts. Then, after giving *Squaw* one of our spare spinnaker booms, we towed out for the start of the race, the course being to Block Island, 23 miles out in the ocean and, as it proved later, the race of the whole cruise.

A dead calm delayed the start until afternoon and it was 12:05 before the "forties" were sent away and even then the air was so light some of the schooners were hardly over the line when we, running along the line, as our starting signal blew, luffed across and stood out to clear Race Rock Light.

What wind there was, was southwest. Most of our class took the western or weatherly end of the line but we were clear of the crowd and in a leading position. Unfortunately for us, however, as we overhauled the schooners a mile or two out we had to go through the lee of them while *Squaw,* our nearest competitor, could go to windward.

We came right up among the schooners near Race Rock and there the wind left us all in the doldrums. With the tide setting us northeast across the shoals at the end of Fisher's Island we let go a light kedge anchor. Some of the schooners anchored, some (to keep off the rocks) had to hold a port tack and force a starboard tack boat to go under their stern—it was no time to argue over rules of the road—as the big deep draught schooners had to keep in deep water.

We found our cable trailed aft, so, although she was making leeway, we hauled up anchor and let her forge ahead. There was a tide rip around the rock the lighthouse was on and we noticed a floating box near it was drifting west so we held on, got into this eddy which shoved us to windward clear of the rocks and stood on with the ocean before us. *Squaw* had also weath-

ered the rock and was leading us, standing east. We held a more southerly course as we noticed the two leading "fifties" down that way were doing well, though one of them was working out east. *Squaw* didn't like the way we pulled ahead and soon hauled up after us and then she ghosted along where we could not find a breath—her very baggy sails were telling in her favor here.

We knew the tide was against us and a swell running in slapped all the air out of our sails in a way to drive one to despair. We tried to work northerly again to find an air —but all we found was calm and a slatting sea. *Squaw* seemed to be stealing ahead, but the rest of our class were all well astern. Then a thick haze shut in and all other yachts disappeared from view. We sang that famous ballad:

"And we stayed in the game
Until Block Island came
Just rolling and banging around."

and that certainly expressed it. Hours went by and matches we threw overboard stayed alongside of us most disgustingly.

Then, about sundown, there came a change in the air. A coolness set in and it was not a haze but a thick blanket of fog which enveloped us. Fog horns, of all tones, were bleating their discordant notes from all quarters. Something was coming. Rain it was, first in drops and then in sheets, then whole clouds dropped en masse and scuppers could not carry off the water. We didn't have oilers for all and so some shivered and shook and let streams of cold water run down our necks.

We took in all light sails, set our running lights and got ready for a squall that was brewing in the northwest. When it hit it laid the *Monsoon* flat for a moment. By our lighted binnacle, when the water ran off it long enough to see the lubber's mark, we found the squall had gone around westerly, so, after the worst was over, we tacked ship and ran before it at steamboat speed through a smooth sea, spattered thick with rain drops. Our horn kept up its warning; and though we could hear nothing when the worst of the squall was raging, it let up so again we could hear foghorns to the south and west of us.

When we ran out of that squall the wind had gone clear around to the southeast. We spied a sail; and who should it prove to be but our friend the *Squaw?* So, side by side, close hauled, we ran with her for some time, until we decided it was about time to lose her, when we split tacks and stood to the south'ard, losing her in the darkness.

The southeasterly breeze hardened about ten o'clock and cleared the horizon, giving us a glimpse of Montauk's flash. We could just about lay our course for the Salt Pond so tacked and stood for it on the starboard tack with a chorus of horns to the south'ard showing several boats had gone too far that way.

You can't pick up the Island until Montauk light disappears astern and, sure enough, when the flash was gone, square over our taffrail, we thought we saw a glare in the low-lying clouds dead ahead. This we found later was the glare of the *Corsair's* searchlight thrown up as a guide to direct the yachtsmen to the finish line. It was pitch black. We made out a port light on our weather quarter but that was all we could see until we picked up the breakwater wink-light ahead. Then it cleared up as we drew near and we made out the *Corsair's* lights clearly and all but fetched the line just as we were going. To make sure of clearing the flagship we tacked to port for a moment and then came for the line; the judges threw their searchlight on the buoy and as we neared the line called through a megaphone "Bear down closer to the flagship." We did so, beating out the fellow whose port light we had seen to windward of us for the last half hour, and received a toot of the steam yacht's whistle announcing our finish at 11:11:12 P. M.

Then came a hail "What yacht is that?"

"Monsoon!" bellowed Frank, who needs no megaphone when he hails. "How many of the 'forties' have finished?" he then hailed and when the reply came, "None, you are the first" there was some thumping of backs and congratulating.

Later, we found out it was the "fifty" *Virginia* that finished right behind us, she and the *Monsoon* being only 26 seconds apart. The "forties" finished as follows:

Squaw at 11:16:00, *Shawara* at 11:31:43 and *Sally Ann* at 11:-53:06.

Only one schoner made the island and that was the *Dervish.* She finished about 1 A. M. at Block Island.

Never yet have I made Block Island dry, and as it proved the race just completed was no exception. But when we awoke the next morning there was promise of a nice day. We draped the yachts with wet clothing but the air was so damp with fog the sun didn't do much drying until about ten o'clock, when the fog cleared and we got under way with the fleet and stood out into Block Island Sound, when a nice, gentle southwesterly breeze set in, but soon died out to a flat, hot calm.

At 10 o'clock the flagship set a postponement signal. Notices had been sent around announcing a change in this day's course. Instead of going south around the southerly end of Block Island we were ordered to go north, straight away for Newport, R. I. Nothing was said about passing the buoys on the north end of the island, so when a nice, brisk southeasterly wind ruffed the water, coming out in a dark line from the Block Island shore, we ran close to the *Corsair* and asked about these buoys and were told to leave them to starboard —to keep west of them. We hailed several of our class rivals and they all understood it; all, as it turned out later, except *Pampero.*

Six schooners with ballooners started first, then the six "fifties" made a start and five minutes later, at 12:51, our starting whistle blew. All but *Shawara* and *Monsoon* carried balloon jibs and all crossed the line well bunched with *Monsoon* to leeward under jib and baby jib topsail, mainsail and sprit topsail. It was a reach to the wink buoy off the north end of Block Island but we figured the headsail we carried would do for the short run to the buoy and do better work from there on.

Our rivals all held a luffing match which carried them so close up under the island they went inside, or east, of a can buoy there which we kept west of, but later we learned that this was not a government buoy but was originally a white can buoy put down for submarine practice but which was now badly discolored. From there they bore away and ran a little ahead of us and went west of the wink light, all except *Pampero,* who hauled up with wind abeam and established a substantial lead and weather berth by doing so.

We were last around the "wink," and hauling up on a close reach we overhauled *Sally Ann* and *Shawara. Squaw,* with her full cut sails, held her lead dead ahead and *Shawara* by hauling up and hardening her wind regained the lead on us.

Pampero, out to windward, we considered out of the race and we lashed a protest flag in our lee rigging so the committee on *Corsair* could see it as they passed us to leeward.

Half way across the wind faired a little and we all set spinnakers.

(*Continued on page* 309)

Across the Atlantic in Neith

By CLIFTON D. WILLARD

Part III

ON July 21st, our third day out of Trepassy, New Foundland, all hands felt an unexpected drop in temperature and it grew very cold by reason of the close proximity of ice, coming down from Greenland. We passed close to a full-grown towering iceberg. It was decidedly ticklish going with these big fellows drifting around over the ocean promiscuously. Although enveloped in a fog we could tell by the tang in the air whenever we were close to one of these bergs, and sometimes we were scared stiff. We surely could have put the ice trust out of business if it had been possible to pass a hawser around one of these boys and tow him into New York Harbor.

At 12 noon the log registered 456 miles. A strong wind was blowing from the sou'west, and an hour later we showed our respect for it by taking in jib and tucking a reef in the mainsail. She went easier after that.

The log read 479 miles at four o'clock. It was now blowing up hard from the same quarter, with the seas making up fast. As darkness came on the wind increased and it looked as if it would be a dirty night.

At 10:45 P. M. we dropped the mainsail on deck, with a hum-dinger of a gale howling along out of the sou'west, right on our quarter. The seas were mountains, and we were like a little peanut shell in the ever-changing valleys between them. The *Neith* behaved beautifully, though. Naturally, we all stood our tricks at the wheel, and that thrill was a wonderful one! Our mizzen and staysail stood the gaff gallantly, and we were being driven lickety-split for election. Each wave had a pronounced individuality all its own. A big, powerful giant would roll under and hoist us high in the air, and as we were let down a wicked looking hisser, foaming at the mouth, would make a vicious grab at us, and missing, go racing on his way, audibly cussing us We just evaded a furious stern-chaser by inches. There were also the middle-rift short jabbers, who hung around expectantly, full of fight, with an awful wallop in either mit. They possessed a weaving-in-and-out style, like our champion heavyweight prize-fighter, only multiplied by about ten million. If one of these had landed, there was no friendly floor nearby on which to take the count in comfort, but the bottom was a long way down, and any other than a sea-going referee might have demurred in executing the necessary formality.

It was this rapidly changing condition, plus the powerful gale which blew us on with a roar, which kept us on tip-toes and *alive* as we never had been before since we started. An ever recurrent thought in our minds was that we might run into something coming in the opposite direction, for it was still thicker than pea soup. We had a swell chance of making ourselves heard with our bellows fog horn. However, old Steve Brodie accomplished something and got by, and so did we!

In mid-Atlantic with a fair breeze on July 26. One of the few days when fog did not shut out the horizon

At midnight the old gale was kicking right along with us. In the wee small hours, at 20 past one o'clock, to be exact, our mizzen halyard parted. We took the hint philosophically, but quickly, to stop down the spanker with end of mizzen sheet and let the staysail alone be the cart horse. Barometer 29.98 and still dropping. We speeded on our way and at 4 A. M., altered compass course to South East, log reading 577 miles. On the E. x S. ½ S. course we had steered since 4 A. M., July 20th, we logged 365 miles.

The Commander's special lullaby, rendered *en route* without instrumental accompaniment, was "Watch below—ten to go!" Gee, how that used to shatter some of our mirages! There was no use praying for total deafness, either! Old Hard Luck visited us again at 8 A. M., when the forestay suddenly wrenched free from the bolt in deck. DeWolf rescued the swinging end, but being unable to locate a nut, made stay fast by bending on a monkey-wrench. That same monkey-wrench was still doing its bit when we left the ship at Burnham two months later!

We now set the storm staysail in recognition of the hefty Nor'wester, the wind having gradually hauled to that direction. At noon the log showed 602½ miles. Variation 30 West. True course N. 75 East. Compass course E. x S., barometer 30.16. Wind moderating.

During the afternoon the old Nor'wester put his foot upon the soft pedal and at 4 P. M. the log read 614½ miles.

At six bells of the same watch we experienced a new and very acceptable experience. The wind went out, and so did we. That is, we didn't exactly carry out Mark Twain's fond desire, when on board ship at sea, of stepping ashore upon an accommodating and beautiful flowery island, bordered with feathery palm trees and burbling waterfalls, but we did the next best thing, to wit, trimmed in sheets, lashed wheel, stowed away some grub, and all hands turned in, as was, and went to sleep, being guilty of a breach of good form in not even wishing each other "sweet dreams"! It would have been a vain wish, anyway, as there was nothing resembling any old kind of a dream that night.

Just to show you how good we felt the next morning, July 23rd, at 8.25 o'clock, we set the spinnaker in regular old racing style, and rang out a challenge to anyone to beat us, albeit the breeze was only a gentle and fickle one from West by South.

The crew of *Neith* were evidently not worrying before they left Halifax. Left to right, Bell, Commander Houghton, De Wolf and Willard

Compass course E. x S. ¾ S., variation 30 West. True course N. 80 E. The old reliable log still registered 614½ miles as it had when we layed her to for the night. Barometer 30.12.

We had logged 659 miles at 4 P. M. Breeze W. S. W. Had a kick, and to show there was no hard feeling we doused spinnaker. Still foggy.

At 6 P. M., the wind shifted to N. W. We had logged 675½ miles at 8 P. M., and the old Nor'-wester was feeling his oats, good and plenty. At midnight we deemed it advisable to take in the jib and reef the main, as it was blowing very hard out of the North West.

On July 24th at 4 A. M., changed compass course to E. S. E. Log 734 miles. We had logged 158 miles on our last course. The gale had not abated much and the seas were running unusually high. The Skipper set the example of driving her, and the different watches were not backward in following suit.

It was a weird and exciting sensation to be hurled through the impenetrable darkness, which could almost be sliced with an axe. That fog sure formed a solid wall all about, and it seemed to be there to stay forever and ever, amen! Everything aboard was slippery and clammy and, beleive me, a fellow had to watch his step to prevent a back flip overboard. At the take-off we acquired the habit while on deck of not letting go with one hand until the other had gripped something tangible. Our skipper, Commander Houghton, may not have felt the continuous and everlasting fog as keenly as the rest of us, but I had been brought up in a land of unadulterated and sparkling sunshine, and that blooming fog was beginning to get to me, and then some. Only the Lord alone knew what was ahead of our smashing, rearing, rooting, foaming bow. We had eyes, it is true, but that didn't count for very much. In short, we did not have a whole lot on the poor, unfortunate individuals who were *sans* sight, *sans* hearing and *sans* speech. One thing proved more or less of a blessing, in a way. This was, that on account of lack of sleep and the constant tired feeling which left us mechanical at times in our actions, our sensibilities were not quite so alive to the possible danger. However, such was life on the ocean wave!

At eight o'clock that morning: compass course East South East, and we had rolled up 762 miles on the log. We had added 26 more miles at midday.

On July 25th at 3.30 A. M., we had piled up exactly 868 miles by the log. As there was a heavy sea rolling, but no wind, we hove-to and all hands hit the hay.

At 9.30 A. M., we had made no more distance, as we had been without wind for five hours.

Noon materialized but still we had no sun. It seemed as if we had bid Old Sol a pathetic farewell when we shoved off from Trepassy on July 19th, and the fog was beginning to get everybody's goat.

All of a sudden, out of the sea, off the starboard quarter, our attention was called in a most astonishing manner to a large number of rapidly moving objects, in perfect military formation, headed directly for us. To all intents and purposes, they were resenting forcibly our occupying space on the same ocean with them. Judging by their business-like and formidable approach, there was not a shadow of a doubt in our somewhat worried minds as to their destructive powers. We did not know exactly what we were up against, not having had any previous encounter to guide us, and naturally waited in keen suspense. When nearly upon us their commander must have issued a "Column Right" order, as they wheeled with beautiful precision. I had never seen so many porpoises in my life!

The log showed only 903 at 4 P. M., or only 35 miles in the last 12½ hours. True course N. 80 E. At 6 o'clock that evening the log had ticked off 918 miles, showing we were picking up. One hour and twenty minutes later we had annihilated another 10 miles. Boy, we were on our way!

Then, the following morning July 26th, the eighth day out of Trepassy, which seemed like any other old morning such as we had been having, but wasn't, at 8 o'clock we landed in the middle of the Atlantic, our half way mark, the log showing 998 miles and the same distance ahead to go! Someone had swiped the mid-ocean buoy, but subsequent events proved that our reckoning was all right, in spite of that serious handicap!

At noon, we had added another 24 miles. The wind was N. N. E., and stiff, but by night it had dropped to a light breeze.

On July 27th, we had light winds and heaving sea. At 6 o'clock that evening we hove-to, and revelled in a swim. Even had the nerve to try our luck at fishing, but the fish must have been out on a strike. At 9 P. M. 1,153 miles were logged, and we ran into our only windward work in the ocean for some half hour, bucking a fresh breeze from E. S. E.

At noon on July 28th the log showed 1,255 miles. This was only 106 miles from our noon position the day before, which was not as good as we had been doing.

At 10.30 P. M. it was blowing up great guns from the Sou'west. This was too much like work, as we were getting lazy, so we lowered mainsail. Even so, at midnight we had reeled off 74 miles since noon. The next morning at 4 A. M. we decided to set mainsail, as the Sou'-wester had abated a little. It kept on dropping and at 8 A. M. was only a light air.

Then we hailed, at last, with a great shout the glorious and scintillating sunshine, which spread ingratiating warmth and good cheer. Gee, how good it felt! All hands were smiling and happy, and forthwith began to act as human beings again. The glittering sunlight was dancing merrily, giving a dazzling

whiteness to wave crests as they rippled and broke, and it was a rare delight to be able to look all 'round, for miles and miles, and see a horizon line and blue sky. An occasional fish jumped, and seemed to wiggle his tail with glee and joyful appreciation. It was for all the world like shooting out of a tunnel, to look all about and see things clearly again. The old seas looked different, the atmosphere we breathed was different, *we* were different, and every breath was freighted with pep and joy of living. The little ship went singing along on her course, keeping time to our heart beats. The barometer was down, but our spirits were way up!

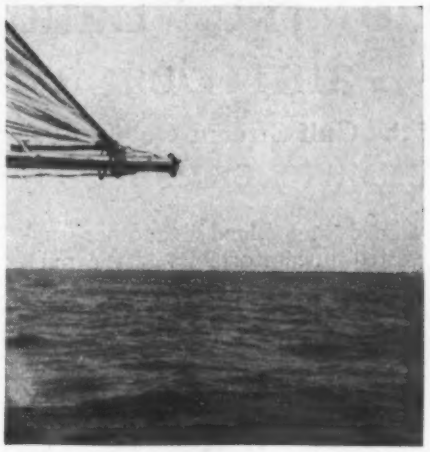
At twelve noon, the old reliable recorded 1,375 miles. This was 120 miles from our previous noon. We were sailing on our way rejoicing and thinking what a wonderful ocean we were giving the once over, when from far astern we picked up a smoke smudge and, later, could make out an Atlantic liner forging up. She proved to be the *Celtic*. As she steamed past us our skipper semaphored a message to be sent by wireless to his wife in London, that all was well with us. The passengers lined the starboard rail and honored us with a number of hearty cheers. A friend of the Commander was aboard the *Celtic*. We met him at Burnham Race Week later, and learned that orders had been given out at headquarters of the Line, that a small sailing yacht was crossing the Atlantic, and for all steamers to watch for her. This interesting meeting at sea further gladdened our lives that day.

At 6 P. M. we began to pay dearly for our short respite as the old "mist" set in once more, and not content with that, it started in to rain to beat the band.

At 8 P. M. changed our course to E. x S. ½ S. per compass. True course N. 83 E. 1424 miles. Barometer 29.78. Varying breeze.

July 30th: 4 A. M. Logged 1471 miles. Wind sou'west. Barometer 29.67—dropping.

It might be stated right here that, notwithstanding the many trying conditions which naturally attended a trip of this kind, all of us aboard the *Neith* got along together in fine shape. The Commander was a good disciplinarian, which is undoubtedly the secret of success of any undertaking where men are thrown together, and this applies more especially to an ocean voyage in a small sailing craft such as this. Each hand had his work cut out for him, and every individual was



The spinnaker was carried a good part of the way

right there on the job. In a way, it is somewhat to be wondered at, considering that most of us had never even met each other ten days before leaving Halifax. "Ding" Bell deserves all the credit in the world for his gameness, in view of the fact of his admitting beforehand that he knew nothing of ships and their ways. He acquired a useful working knowledge rapidly, and did his trick throughout. We had one good one on "Ding." He had brought a big bath sponge aboard with him, and the Commander threatened to hang it over his bunk with a dainty pink ribbon pendant. He was a regular fellow, however, and one could not have wished for a better shipmate.

Our First Mate, "Tas" De Wolf, although only 21 years of age, had had considerable experience at sea, on square riggers, etc. His judgment was good, and he was a dandy chap to work with.

Commander Houghton, was a capable skipper and possessed a redeeming sense of humor, which helped a lot in view of the young crew he had the bad taste to select. He had two sons of his own at home, which may have accounted for his fortitude in standing for our company. We tried to make him feel at home! At any rate he was a fine leader, and each of us thought a great deal of him and would have shipped to the North Pole, or any old place with him. He always did more than his share of the work, he was fearless, and at all times showed consideration, patience and good nature. His cheery smile and happy disposition made him a real companion. He saw the *Neith*, admired and purchased her, and had the sporting blood to sail her to his English home, after failing on his first attempt.

Our colored Barbadian cook, Jordan, was right there with the chow, albeit the heavy weather did not agree with his constitution. He kept the "Shipmate" working overtime, however, and he never failed to produce a good hot meal. While I was the only American aboard, "Ding" and Tas" being Canadians, we got along as if we had known one another all our lives. They say there is a great deal of good-fellowship in a ham sandwich, but it has nothing on being shipmates on a real cruise.

On this day, the 30th of July, at 8 A. M., we changed course to N. 88 E., true, and the number of miles logged was 1498. We had registered 57 miles on the last course. Wind W. S. W. Barometer 29.64—going down still more. We had, of course, been sailing a great circle course, which made necessary a change in the true course every few degrees, while the constantly changing variation meant constant changes in the compass course.

At midday, New Foundland was 1523 miles astern. Variation 23 West. True course N. 88 E. Changed the clock to two hours ahead, as we had not been changing it daily during our eastward run.

A strong west wind was making things interesting during the afternoon and cleared away the fog, while it increased our speed.

At 6 P. M., the log showed 1552 miles, or 29 since noon. Barometer 29.78—rising.

Once again we hailed the blessed sparkling sunlight and warm weather. It would not have taken very much of a line of talk on the part of some walking delegate at that time to win us over to the noble band of the Sun Worshippers Union.

(To be continued)

A. P. B. A. Changes Gold Cup Limitations

In order to make the A. P. B. A. classic, the Gold Cup race, within the reach of more power boat owners, the limitations on boats and engines in this event have been changed. For the year 1922, boats in this event are limited to displacement type, of a maximum piston displacement of 625 cubic inches, with a minimum length of boat of 25 feet. This will let in smaller boats and boats with less power, while a maximum cylinder volume and a minimum length will prevent overpowering the boats or putting in excessive power in a very small hull.

The Voyage of the "Land Crab" from Palm Beach

How a little matter of the Gulf Stream Current has to be reckoned with.

By EMMETT CAMPBELL HALL

THE palm trees bent and the waters of Lake Worth rippled in the steady, cooling draft of the trade winds, and the good ship *Land Crab,* thirty feet overall and with a record of four miles per hour when wind and tide and motor happened to agree, gently bumped the concrete of the West Palm Beach pier.

Then upspake Captain "Dudd," with a manner bold and free: "I'm off for foreign lands, my lads; who dares the deep with me? Just sixty miles to Eastward does the Great Bahama lie, and the *Land Crab* voyages thither, for I'm most uncommon dry. So like stout Cortez, Drake and such, who used these seas to roam, let's go beating down to windward, where the frothing schooners foam. So ho! for the bars of the coral isles, where the highballs heave and drum, and a sailor-man with a sailor-thirst can drown himself in rum!" So a hitch he gave his trousers, and most regally spat he, and the *Land Crab* sought the Inlet that would lead her to the sea.

Or something like that.

Anyway, through the new Lake Worth Inlet, the gallant craft more or less sped and laid her course dead East for Settlement Point, the extreme northern tip of the most northern of the Bahama Islands, large enough to find without a search warrant, and Captain Dudd and his jolly mariners had no friendly feelings for search warrants, instruments which seem to have been devised for the particular purpose of taking the joy out of life on the Florida east coast. There was a stiff head wind, and allowing for this, the voyagers calculated that about sixteen hours would be required for the passage.

When eighteen hours had passed, and the glad cry of "Land!" had not rung out across the blue water, faint doubts began to cloud the skies, and at the end of the twentieth hour, everyone aboard was constituting himself forward lookout.

"Gee!" commented a no longer jolly mariner, "I hadn't any idea the ocean was so big—or so gol darned lonesome."

"Do you suppose we could have missed that island?" another suggested uncomfortably. "We must be nearly to the middle of the Atlantic by now. Hadn't we better turn back?"

But Captain Dudd was made of that same stern stuff from which Columbus had been formed, and, like that gallant seaman, merely responded, "Sail on!" and continued to point the nose of the *Land Crab* dead east. However, when thirty hours had dragged their weary course, there was open mutiny.

"At the least calculation," the ex-jolly mariners argued, studying the map that had been looted from a school geography, "we are a hundred and twenty miles from the mainland. We obviously passed to the north of Settlement Point, and the only land ahead of us is Spain. That's too far to go to get a drink, even. Now, if we head southwest, we are bound to hit something; a blind man couldn't miss finding one of those islands, and even if we did that, we'd be bound to run against Cuba."

"Oh, well, have it your own way," Captain Dudd responded coldly, and the *Land Crab* changed her course. Ten hours later a low lying shore lay along the horizon, and drooping spirits revived at the glad cry of "Land!" Presently, houses could be distinguished, and there was real joy among the voyagers.

"I'll say it's Nassau," one hazarded. "Fine place, Nassau. And there are regular boats that run to Miami," he added, with a scornful glance at the gallant craft beneath his feet.

"Nassau, nothing! It's Havana," another contended.

"Well, we'll soon find out," a third soothed, but they didn't. Something seemed to be wrong with that town. It persistently slid away to the south, though the shore line itself came slowly nearer, and at length an inlet opened before them. Like a weary steed that sees the end of its journey, the little *Land Crab* surged forward with renewed energy, passed between jetties and breakwaters still in course of construction, and finally floated peacefully on a broad, rippling lagoon, while the tired motor coughed a time or two and then grew silent.

"Gas tank empty," Captain Dudd announced. "However, it lasted long enough to get us somewhere," he added cheerfully. "Here comes a native—he can bring us a can of gas and a bottle of the real old stuff, I suppose."

The native in question was a very black man in a small motor boat, and as he drew near he grinned in a friendly fashion.

"Hi!" shouted Captain Dudd, in the manner accepted as proper for addressing natives of strange lands. "You catchum gasoline?" He waved his hand toward his silent motor. "Putt-putt no can do!" he explained. "Want fire-water, too," he added, at the urgent prompting of the jolly mariners. "Heap-much fire-water!"

"What de matter you, Mister Thompson?" the native demanded in astonishment. "What yo' mean by dat funny talk?"

Captain Dudd stared dazedly at the native, then rolled bulging eyes around the landscape.

"Say," he almost whispered, "what's the matter with me? If that nigger ain't Pete Adams, I'll eat him—and, and we've just come through the Inlet into Lake Worth! Say, what's happened to us, anyway?"

"Oh, nothing, nothing at all!" a Jolly Mariner responded bitterly. "You just took us out for a merry sail on the bounding main, and now we've come rolling home again, yo, heave ho, my hearty! Of all the bone-headed, lack-wits; of all the —" and so on and on and on.

"Well, but," humbly protested Captain Dudd, when the Jolly Mariner had run down, "just what *did* happen?"

The other looked at him in pity.

"Don't you understand yet?" he questioned gently. "Nothing happened except that you failed to allow for the four-mile-an-hour northerly drift of the Gulf Stream, and this old tub was making a bare three miles an hour against the wind, while you held her dead east. If we hadn't headed southwest just when we did, we'd have made Norfolk harbor about day after tomorrow. Say, you must have had a flash of almost human intelligence when you named this thing the *Land Crab.* It makes all its headway sideways!"

Friar Tuck, a 42-foot express cruiser, owned by R. G. Campbell, of New York Mills. A feature of her construction which is unusual for a boat of this size is her subdivision by four watertight steel bulkheads

Handicap Class Championships

The season's championships in the Handicap Yacht Racing Class of Long Island Sound for the past season have just been announced. While the racing in the Class during the year has been unusually good, with 35 of the 40 boats enrolled taking part in the racing, only a few of the boats qualified by sailing in one half of the scheduled events, and this fact has kept boats that did exceedingly well in the races in which they sailed from winning the series, which they might have done had they showed up at the line a few more times.

In the First Division *Azor*, owned by C. A. Marsland, was the only yacht to qualify and she took the series with the unusual high percentage of 77. In the Second Division, *Sally IX*, owned by Dr. A. E. Black, was the winner, while in the Third Division, *Acadian*, owned by F. E. Raymond, won after a very close contest with *Quakeress III*, C. L. Weyand. The racing in this last division was at all times keen and the result was in doubt up to the very last race. In figuring championships, four of the races during Larchmont week were not championship events, the only two of this mid-summer series counting for championship points being the races on the two Saturdays. Following is the complete standing of the boats that qualified in the various divisions:

FIRST DIVISION

Boat	Number Starts	Percent
Azor, C. A. Marsland	10	77.0

SECOND DIVISION

Sally IX, A. E. Black	13	70.0
Pingvin III, P. A. Kjeve	10	51.0

THIRD DIVISION

Acadian, F. E. Raymond	17	62.7
Quakeress III, C. L. Weyand	16	61.0
Robin Hook III, G. E. Gartland	13	45.7

The championship winners in the regular classes of the Long Island Sound Yacht Racing Association have not as yet been announced.

An express runabout 36 feet long with a sedan cabin, designed by Henry J. Gielow, Inc., for Col. J. R. Moodie, of Hamilton, Ont.

A 36-Foot Express Runabout

An express runabout of rather unusual character has been built recently for use in Canada from designs by Henry J. Gielow.

During the Motor Boat Show last winter, Col. J. R. Moodie, of Hamilton, Ontario, after examining the different designs and methods of construction of the boats exhibited at the Show, commssioned Mr. Gielow to design for him an express runabout for his own use. The boat is 36 feet in length, by 8 feet beam, with a sedan cabin amidships, and she shows a speed of 30 miles an hour with a 4-cylinder G. R. Sterling motor.

Friar Tuck—A 42-Footer

When one sets out to design the most complete express cruiser with the intent of incorporating in her everything that makes for comfort and convenience, he should study the *Friar Tuck* first. R. G. Campbell, of New York Mills, N. Y., built her for himself from one of William H. Hand's, Jr., designs. While she is only 42 feet by 10 feet, she has electricity for heating, lighting and cooking, a pressure water system, six berths, fifteen miles cruising speed and four steel watertight bulkheads.

There is a sunken cockpit well forward. The fuel tanks are under it. A watertight steel bulkhead here would hold *Friar Tuck* afloat if the bows were stove in. Then comes the galley, with cupboards and more handy storage room than a kitchen cabinet. The main cabin forward can be made up with four berths—2 uppers and two lowers—amply wide and long.

The next section has a toilet room on one side and steps from the bridge deck on the other, also a

Forward cabin of *Friar Tuck*

Electric range in galley

Companionway and door through bulkhead to engine room

Bridge deck amidships

large clothes locker. Then comes another watertight steel bulkhead with a watertight door to the engine room, which is under the bridge deck. In the engine room is a 4-kilowatt 140-volt Universal generating set and a dual valve Sterling 180-horsepower six, with especially modified compression and arranged to turn 1,200 revolutions per minute. An electrically driven fan provides forced ventilation, and an electrically driven bilge pump will drain all compartments.

How carefully the engine, propeller and speed were calculated is borne out by the revolutions of 1,240 using a 26-inch diameter by 18-inch pitch propeller.

The after wall of the engine room is another watertight steel bulkhead, and still another divides the stern deck and after cabin. There are two berths in the trunk cabin with storage batteries and fresh-water tanks under. Following the majority of Hand's designs, a passage has been left on each side of cabin.

The boat is so well built she should last a lifetime.

The Month in Yachting

Narragansett Bay Yachtsmen Form Racing Ass'n

A revival of racing is looked for in Narragansett Bay next season, due in part to the activities of a few of the sailing men who have started to organize a racing association. At present the plans are somewhat indefinite, as the power boat men are clamoring for a power division, and it looks as if the demand would be great enough to put it over.

Racing has been as dead as an oil-fed menhaden for several years. The old Narragansett Bay Yacht Racing Association ceased to function when the war came on and has never been resuscitated. Some of the clubs attempted last summer to run open races, but with two exceptions there were not enough entries to make them interesting. The general talk was that it was time something was done to wake things up, but about everybody was taking it out in talk, waiting for "George" to do it.

So "George" did. It was not deemed advisable to have any one club take the initiative, so acting as an individual, with the backing of a few boat owners, George E. Cutting, of the Rhode Island Yacht Club, sent out about twenty invitations to sail yacht owners to attend an informal meeting at one of the downtown business offices.

Fourteen attended and the association was born. Dr. H. D. Murray, of the Edgewood Yacht Club, owner of the yawl *Swiftwind*, was elected temporary chairman, and A. W. Davis temporary secretary.

In the course of the informal discussion, the Star class was suggested as one wholly suitable for racing here, and a committee was appointed to investigate the possibilities of creating a Star class as the nucleus of next season's racing. Since then the committee has visited Port Washington and got in touch with the Star men there, and Nahant, Mass., where a class of eleven Stars have raced for several seasons. The committee's enthusiastic reports of the merits of the Stars,

aided by a showing of photographs and models, have got prospective owners and builders interested, so that now there are at least a dozen men ready either to build or buy, and a committee is out looking for Stars that are on the market, while another committee is listing up the boats on the Bay that formerly sailed in the old Narragansett Bay Association classes. At the second meeting, fifty-three of these older boats, ranging from the Herreshoff 15-footers to the "B" class boats, were checked up, and there is no doubt but that a canvass of the clubs and yards will dig out many more.

The new association has adopted the name Narragansett Bay Yacht Fleet, and the avowed objects are to encourage racing and formulate and enforce uniform rules for the conduct of open races. Several of the clubs have held their annual meetings and elected officers for 1922, and in most of them there has been a decided movement to elect sailing men to the regatta committees. On the Rhode Island and East Greenwich Club committees sailing men predominate, and the Edgewood Club has elected only the chairman, a windjammer, and left the rest of the committee for him to select.

New Class "R" Boats for San Francisco Bay

San Francisco Bay is going to have some excellent racing in the "R" Class next summer. Already four new boats are under way for those waters and will be ready in time for the opening race next season. The yachtsmen of San Francisco Bay have wisely gone to different designers for each of these boats, so that the racing should be more interesting than if all the boats were from the board of the same naval architect.

Arthur Rousseau is having a new boat built from designs by C. D. Mower, the boat being built by Madden. John Alden has designed a boat for a syndicate of the San Francisco Yacht Club, and Geo. Owen is furnishing the plans for a syndicate of the Corinthian Yacht Club, while Lester Stone has designed a boat in this class which is being built at his own yard. These four boats, with the Gardner-designed *Machree* already in those waters, will assure excellent racing.

With the Southern California Yachting Association regatta a feature of the season it is possible that all the R boats of the Coast will meet there.

Getting ashore under difficulties. Members of the Walton and Frinton Yacht Clubs of England landing on the Gunfleet Sands at low tide. Hard lines on the crews of the yachts

Class "Q" Championship Series at Chicago

THE Jackson Park Yacht Club has a reputation for hospitality which has never been questioned, but it may be that it did strain a point when it held the races for the "Q" Class Championship and admitted for competition not only the boats sailing regularly in the class, but also Samuel Dauchy's Class "R" boat *Sari*, which was able to measure into the next class above by using a slightly larger mainsail and moving her forestay out to the stem head. In any event, *Sari* was allowed to enter under the burgees of the Chicago Yacht Club, which was also represented by *Siren* and *Spider*, both well-known "Q" boats, *Siren* having won the Waukegan race and the race to Milwaukee this year, and *Spider* having had a fine racing record on Lake Erie. The Jackson Park Club was represented by *Gem*, *Princess*, *Chaperon* and *Jackson Park II*, all smart boats and all dangerous under various conditions of wind and sea.

The great difference in size between the older "Q" boats and those of more recent years had compelled the club to abandon the flat racing in the class, and in consequence the boats received various allowances from *Gem* and *Jackson Park*, the scratch boats of the fleet. These allowances were based on their measured rating under the Universal Rule, and resulted in *Chaperon* receiving a generous amount of time, with a still more generous allowance to little *Sari*, which even under her larger rig just managed to squeeze into the class.

So far as weather conditions went, there was a complete variety, the first day rough water and a good northwester blowing, the next morning smooth water and a good wholesail breeze, and in the afternoon smooth water and a light offshore wind, which died away to nothing and finally came in off the lake at the finish of the race. October racing is a novelty on Lake Michigan; but it has its strong adherents now, as plenty of wind and weight in the breeze gives opportunity for the real foul weather sailor to exercise his skill. The races were held off Jackson Park Saturday afternoon, October 8, and the morning and afternoon of the following day.

The first race was a triangle, four miles to the leg, with the first leg a broad reach, the second leg a close reach, and the final leg a beat to the finish line. Some of the boats were late in getting to the line and, in consequence, *Spider*, *Gem* and *Sari* got much the best of the start, and were well on their way before the others came to the line at all.

Gem led around the first mark, followed by *Sari* and *Spider*, but the rest of the fleet was close behind, and they made a pretty picture in the strong breeze, particularly when the puffs came a bit fresh and the boats heeled to their rails in the rough water. The boats behind seemed to close up on the leaders a bit, although the powerful *Gem*, in the freshening wind, gained consistently all the way to the next mark.

In rounding the second mark the fleet divided, and while most of the boats came about at once and stood to the westward and inshore, a number held on the the south'ard

on the starboard tack. The boats which held inshore had somewhat the best of it, as the wind favored them a bit. The sea was smoother, and, in consequence, when the two divisions converged it was apparent that *Gem* would just manage to land in first place, which she was able to do, but with not nearly enough margin to enable her to save her time over *Spider* and *Sari,* which were close behind her. On this last leg *Sari* actually gained on *Gem,* the smooth sea and the fresh breeze being exactly what she needed.

It was a fine race in a fifteen-mile wind and a fairly rough sea, but it was cold in the fresh northwester, and the crews were glad enough to make for the harbor and the friendly club house.

SUMMARY—FIRST RACE—3 P. M.

	Finished	Elapsed	Corrected	Position	Allowance	Per Cent
Gem	4:21:25	1:21:25	1:21:25	*	....	85
Spider	4:22:14	1:22:14	1:21:21	*	0:53	..
Jackson Park II	4:22:31	1:22:31	1:22:31	4	....	57
Siren	4:22:47	1:22:47	1:22:12	3	0:35	71
Sari	4:24:55	1:22:55	1:18:10	1	6:45	100
Princess	4:25:55	1:25:55	1:25:11	6	0:44	28
Chaperon	4:26:39	1:26:39	1:25:01	5	1:38	42

* Disqualified.

Next morning a moderating wind and a little real sunshine made conditions much more comfortable, and it was a more contented lot of sailormen who made their way to the snug and sheltered anchorage where the racing boats were moored. Still, the flags were snapping in the fresh northwester as we looked over the tree tops to the Coast Guard station, where the ensign was flying at the staff.

The morning race was set for ten o'clock, the course four miles to leeward and return, twice around, or sixteen miles in all, and while *Chaperon* did not cross the starting line, the rest of the fleet was there, and much more promptly than the day before. *Gem, Spider* and *Sari* again were on the line with the gun, *Sari* a bit ahead, but she was soon overtaken by *Gem,* which crossed her stern, killed her headway, and went to the southward. *Spider* and *Sari* had a fine tussle as they ran side by side for the best part of a mile, *Spider* having some trouble with a borrowed spinnaker, which was a bit too long in the hoist to be effective and was with difficulty kept out of the water when the boat rolled. *Gem* again ran away from the fleet and rounded well in lead, but on the windward work she failed to gain in any such measure as to leeward. She was followed around the inner mark, on the first time round, by *Spider* and *Princess,* with *Sari* close behind. *Jackson Park* was next, with *Siren* last and not doing as well as was expected. There were no changes in the second leeward leg except the overtaking of *Sari* by *Jackson Park,* which rounded the outer mark a few seconds ahead of the "R" boat.

With smooth water inshore and a steady breeze, it was the canny skippers who made for the land, or so at least it proved, for as the boats again converged *Gem* was seen to have the lead, with *Jackson Park* in second place, while *Sari* was able to force *Spider* about and slipped across the line in third place, less than four minutes behind *Gem,* and well within her time allowance.

SUMMARY—SECOND RACE—10 A. M.

	Finished	Elapsed	Corrected	Position	Allowance	Per Cent
Gem	12:29:22	2:29:22	2:29:22	2	....	83
Jackson Park II	12:30:14	2:30:14	2:30:14	3	....	66
Sari	12:33:18	2:33:18	2:25:12	1	8: 6	100
Spider	12:34:25	2:34:25	2:33:22	*	1: 3	..
Princess	12:35:23	2:35:23	2:34:30	4	0:53	56
Siren	12:42:47	2:42:47	2:42:05	5	0:42	33

* Disqualified.

It was quite apparent that the wind was falling fast and would hardly last through the afternoon, and while there was a fair amount of it still blowing at the time of the start, three o'clock, it fell steadily until near the end of the race, and the question was whether enough of it would last to enable the boats to finish the race.

The course this time was the same triangle which was sailed the day before. *Sari* was close to the flag, *Spider* just inside of her, *Gem* next, and the rest of the fleet further inshore, and all close to the line at the gun. All set spinnakers; *Spider* hauled across *Sari's* stern and passed her, while the rest of the boats were having a battle royal for position inshore and to weather. *Gem* was compelled to luff to avoid being blanketed, and finally took in her spinnaker, which slowed her down, and she was last around the first mark, *Spider* leading at this point, followed by *Princess* and *Siren, Sari* and *Jackson Park* in the order named. The boats kept this order throughout this leg, except that *Gem* passed *Sari* to windward and left her last boat of the fleet.

Soon after the second mark was passed by the boats the wind began to lighten. All the fleet except *Gem* and *Sari* stood to the northwest on the port tack. *Gem* went well inshore in search of a breeze, but failed to find it and the whole fleet moved more and more slowly in the dying air. Of the boats in the northern division, *Spider* seemed to be doing the best, and finally gained the lead over *Princess, Jackson Park* and *Siren. Sari* now came about and made for the shore in the vicinity of the South Shore Country Club, hoping to find a draft of air close under the land. She passed astern of *Gem* and seemed for a few moments to have found something and to be moving better than the others, but at last the entire fleet lay practically becalmed. Then a faint ripple on the water was seen. Boats farther out on the lake began to ghost along, and at last the breeze reached the boats to the northward and they slipped across the line, not many seconds apart. *Spider* finished first, but *Jackson Park, Princess* and *Siren* were close behind her, and all within six minutes of the leading boat. *Gem* was next to last boat this time, the light air not being at all to her liking.

SUMMARY—THIRD RACE—3 P. M.

	Finished	Elapsed	Corrected	Position	Allowance	Per Cent
Spider	5:14:51	2:14:51	2:13:58	*	0:53	..
Jackson Park II	5:16:00	2:16:00	2:16:00	2	....	83
Princess	5:17:21	2:17:21	2:16:37	3	0:44	66
Siren	5:17:34	2:17:34	2:16:59	4	0:35	50
Gem	5:19:53	2:19:53	2:19:53	5	....	33
Sari	5:21:11	2:21:11	2:14:51	1	6:45	100

* Disqualified.

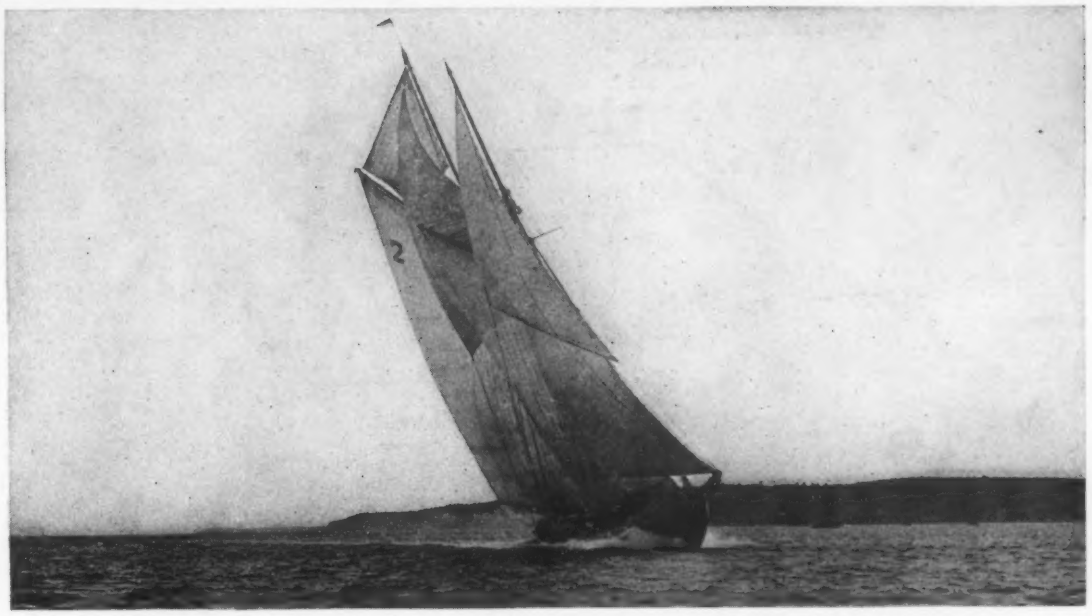
Although *Spider* won on elapsed and corrected time, as she was disqualified, the race again went to *Sari.*

TOTAL POINTS

Sari	300
Jackson Park II	207
Gem	202
Siren	154
Princess	145
Chaperon	42

The races were excellently managed and there were no fouls or protests. It was unfortunate that the judges felt compelled to disqualify *Spider* in the series, but they had no choice under the rule, which clearly prohibits any boat in this class from carrying six persons in her crew. In any event, she would have been unable to obtain enough points to win the cup.

It was very remarkable that, in a series of races with boats of such great disparity in size and capacity, and under greatly varying weather conditions, the boats should have been so close together in each race.



Bluenose was tender and sailed at a much greater angle of heel than usual with fishermen

How the Fisherman's Race Was Sailed

Details as to the Handling of the Two Schooners and their Comparative Speeds on All Points of Sailing

FOR those who are interested in a more technical account of the handling of the *Bluenose* and *Elsie* in the two races off Halifax, last October, than was given in the stirring story of that event by Frederick William Wallace in the last issue of YACHTING, the following account of each move made by the two skippers in the two races sailed is worthy of study. It is from notes kept by Capt. V. C. Johnson, one of the International Committee in charge of the race. He has also figured the time and speed between each mark of the course, and thus gets the only accurate comparison of speed on each point of sailing yet compiled. It shows the *Bluenose* the faster on nearly every point of sailing, the difference being most marked, of course, in the windward work. This was to be expected, as the Canadian was not only a much larger and more powerful vessel, with some 1.500 square feet more sail, but was a product of 1921, whereas, the *Elsie* was built eleven years ago.

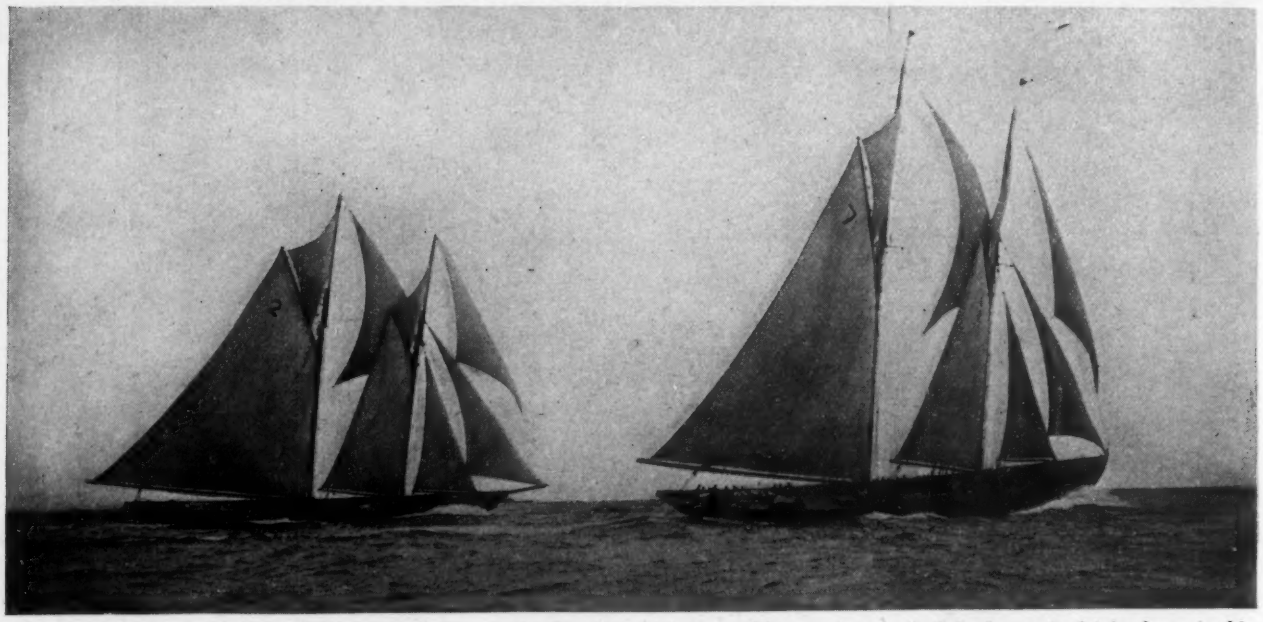
The speeds made by the two schooners in the first race were truly remarkable, and are undoubtedly near the limit to which either vessel could be driven. On one nine-mile reach *Bluenose* averaged nearly 13 knots (12.95, to be exact) in rough water. *Elsie* did the distance at a 12.54 knot clip. Some traveling, we'll say!

In the handling of the vessels "Marty" Welch had it over Angus Walters of the *Bluenose* on the starts, and in sail-handling the American crew was smarter than the Canadian. On the rest of the maneuvering the American skipper did not seem to have anything on the Canadian, and honors were about even, except in the last race, where Welch turned the buoy into the windward leg wide and gave Walters a chance to slip through and get on his weather, when he might have been kept under *Elsie's* lee, where he'd have had some trouble getting clear.

Slugging through it on *Bluenose*

First Race, October 22nd

8.55. Five-minute gun fired. Wind west-north-west, 20 miles. Two minutes before gun *Bluenose* to weather of *Elsie*, standing to west, both on starboard tack. One and one-half minutes before gun *Elsie* bearing down to line. *Bluenose* 200 yards astern. One minute before gun *Elsie* too soon, has to bear away to leeward of line. Thirty seconds, *Bluenose* coming rap full on starboard tack. *Elsie* gets beautiful start seven seconds after gun. With rap full both vessels set fore topsails and balloon jibs. *Bluenose* crosses line forty-nine seconds after gun. *Elsie* set staysail one minute after crossing line. *Bluenose* set staysail one and one-half minutes after crossing. *Bluenose* in weather



Bluenose (No. 2) wading past a knockabout fisherman in the Canadian trial races. The superior speed of the former is plainly shown in this picture

position with *Elsie* ahead but to leeward. Both vessels running off on starboard tack with wind two points abaft the beam. Wind 20 miles.

9.04. *Elsie* luffed out and crossed *Bluenose's* bow to prevent her passing to weather.

9.12. A luffing match developed. *Elsie* leading, *Bluenose* attempting to pass her to weather. *Elsie* carried *Bluenose* ¾-mile off her course.

9.17. Both boats luffing violently. *Elsie* outluffs *Bluenose*. Latter bears away for the buoy. Both vessels running off with wind on quarter, *Bluenose* to leeward; *Elsie* slow in bearing away and apparently lost ground.

9.23. *Bluenose* passed through *Elsie's* lee, taking lead.

9.32.58. *Bluenose* around automatic. 9.34.21. *Elsie* around buoy. *Bluenose* led *Elsie* 1m. 23s. around first mark and squared off for the southeast automatic. Wind well aft on starboard quarter. On the run *Elsie* seems to be overhauling *Bluenose*, both vessels keeping well to weather, of course.

10.05. Both vessels very close together. *Elsie* luffed across *Bluenose's* stern is now on her weather quarter. Both vessels rolling very heavily, almost dead before the wind.

10.10.29. *Bluenose* rounds southeast automatic and immediately sets staysail. 44 seconds ahead.

10.12. *Elsie* sets staysail. Vessels are now running northeast by north, nine miles, for Shut-In-Island bell, port tacks aboard, wind a point abaft beam. Both vessels carrying all light sail, wind west-north-west, 25 miles.

10.25. Both schooners begin to luff. 10.36. Both vessels squared away on course again. *Elsie* seems to have lost ten or fifteen seconds by luffing too far, while *Bluenose* carried on her course. *Bluenose* 200 yards in lead.

10.52.12. *Bluenose* hauls round Shut-In-Island buoy and stands in toward land on port tack. Doused her staysail and took in fore gaff topsail

10.54.16. *Elsie* rounds. 10.55. *Bluenose* tacked ship. *Elsie* standing in toward shore carrying both topsails, staysails and balloon jib.

10.59. *Elsie* tacks almost on same spot as *Bluenose*. *Elsie* set fore gaff topsail again after tacking and fisherman's staysail.

11.10. Balloon jib halyards seem to have carried away on *Elsie*. Still carrying two gaff topsails and staysail.

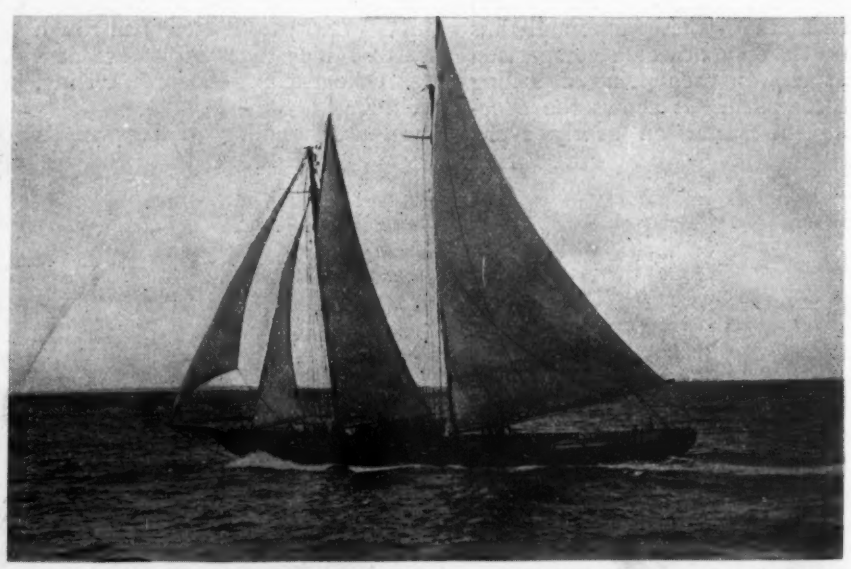
11.30. *Elsie* again set her balloon jib.

11.34. *Elsie* carries away her foretop. Six minutes later takes in her staysail and then *Bluenose* hauled her main topsail down to masthead.

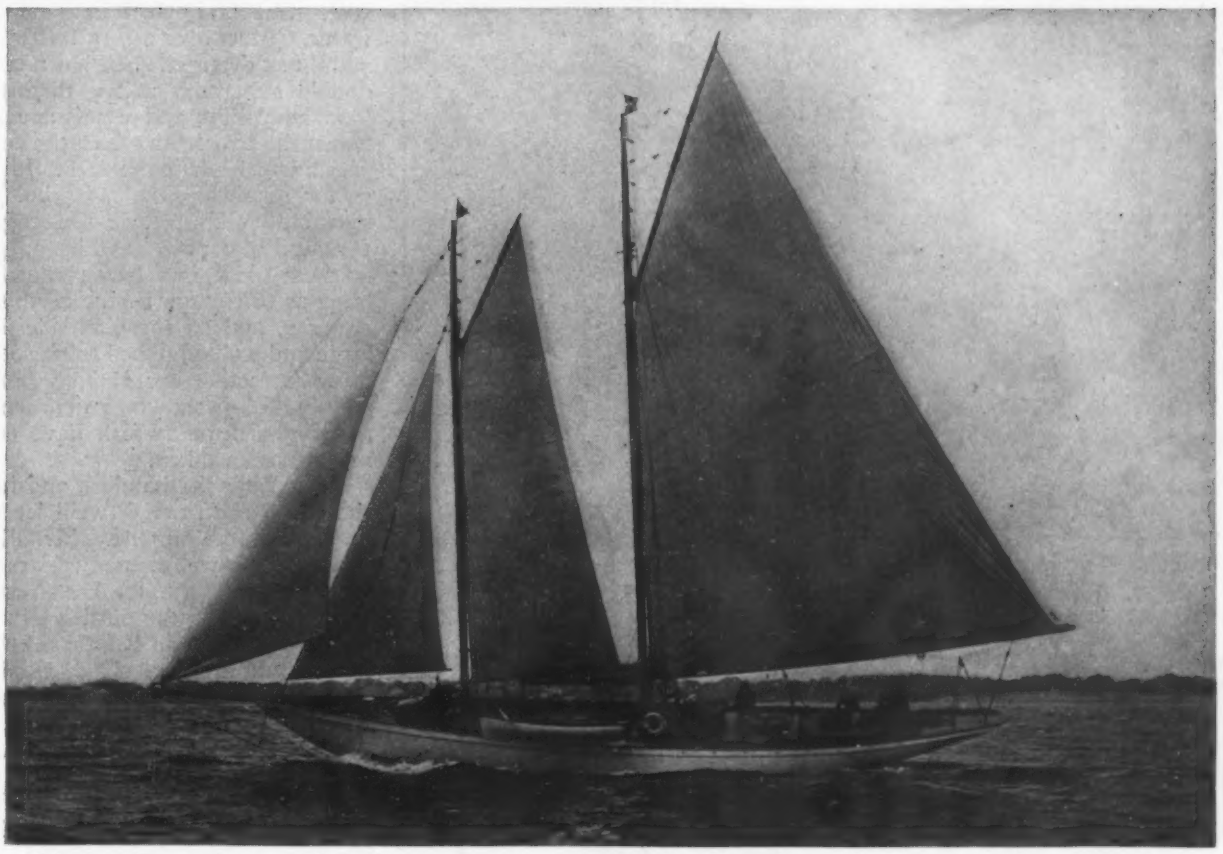
11.42. *Elsie* tacks. Now on port tack standing into land. Wind now blowing 27 to 28 miles.

12.00. *Bluenose* about two miles to weather of *Elsie* and not more than ¼-mile astern, both standing into land on port tack. *Bluenose* carrying four lowers and the clewed down main topsail. *Elsie* four lowers and full main topsail.

1.33.45. *Bluenose* finished. 1.46.-15 *Elsie* finished.



Mayflower appeared on the course and jogged along with the racers on her way to the Banks. With topmasts struck and dories nested on deck she still showed great speed. A race between her and *Bluenose* would have been an event worth watching



Wanderer IX, a 44-foot modified fisherman type schooner, designed by C. D. Mower for Harvey J. Flint, of Providence

Second Race, October 24th

8.55. Five-minute gun. *Bluenose* under Georges Island, starboard tack. *Elsie* standing across to Imperoyal on port tack. ½-mile apart. Three minutes before start *Elsie* still on port tack. *Bluenose* coming slowly down harbor before wind. Two minutes before gun *Elsie* jibes over on starboard tack heading toward line. One minute before gun *Bluenose* ¼-mile north of line. *Elsie* standing parallel to line towards breakwater on starboard tack. *Elsie* gets beautiful start, going fast, everything set and drawing and going fast. *Bluenose* coming rather slowly, crossing 1m. 52s. after gun. Wind on starboard quarter blowing 15 miles an hour.

9.28. *Bluenose* gradually hauling up on *Elsie*. Latter luffing out a little across *Bluenose's* bow. Both boats luffing a little to weather of course.

9.45.30. *Elsie* rounds buoy and hauled up for Sambro Light Buoy.

9.46. *Bluenose* rounds. On the run of 6.3 miles *Bluenose* has picked up 50 seconds. Both haul up west-southwest, with wind two points abaft the beam.

9.53. Both vessels keeping well to weather of course in under Chebucto Head. Wind seems to be freshening in under the land.

10.35. Wind freshened to 20 miles an hour. *Bluenose* gaining.

10.45. Both vessels took in staysails ¼ mile from buoy.

Inner Automatic Buoy—6.3 miles, broad reach

	Time	Elapsed Min. Sec.	Speed Kts.
Bluenose	9:32:58	32:09	11.76
Elsie	9:34:21	34:14	11.04

S E Automatic Buoy—6.4 mile run

	Time	Elapsed Min. Sec.	Speed Kts.
Bluenose	10:10:29	37:31	10.23
Elsie	10:11:13	36:52	10.41

Shut In Island Buoy—9 miles reach

	Time	Elapsed Min. Sec.	Speed Kts.
Bluenose	10:52:12	41:43	12.95
Elsie	10:54:16	43:03	12.54

Inner Automatic Buoy—11.3 miles, beat to windward

	Time	Elapsed Hr. Min. Sec.	Speed Kts.
Bluenose	1:01:00	2:08:48	5.27
Elsie	1:13:10	2:18:54	4.89

Finish—6.3 miles reach

	Time	Elapsed Min. Sec.	Speed Kts.
Bluenose	1:33:45	32:45	11.55
Elsie	1:46:15	33:05	11.44

Elapsed Time—Average for Race

	Time Hr. Min. Sec.	Speed Kts.
Bluenose	4:32:56	8.63
Elsie	4:46:08	8.24

SECOND RACE

Start October 24

Elsie	9:00:32		
Bluenose	9:01:52		

Inner Automatic Buoy—6.3 miles

	Time	Elapsed	Speed
Elsie	9:45:30	44:58	8.4
Bluenose	9:46:00	44:08	8.56

Sambro Auto.—11.25 miles reach

	Time	Elapsed	Speed
Elsie	10:46:49	1:01:19	11.02
Bluenose	10:47:15	1:01:15	11.03

S E Automatic—9.6 miles, broad reach

	Time	Elapsed	Speed
Elsie	11:49:28	1:02:39	9.19
Bluenose	11:49:45	1:02:30	9.21

Inner Automatic—6.4 miles, beat windward

	Time	Elapsed	Speed
Bluenose	1:23:00	1:33:15	4.12
Elsie	1:31:35	1:42:07	3.76

(Dead beat and both overstood)

Finish—6.3 miles, long and short leg

	Time	Elapsed	Speed
Bluenose	2:21:41	58:41	6.44
Elsie	2:31:12	59:37	6.34

Elapsed Time—Average for Race (Course 39.85 miles)

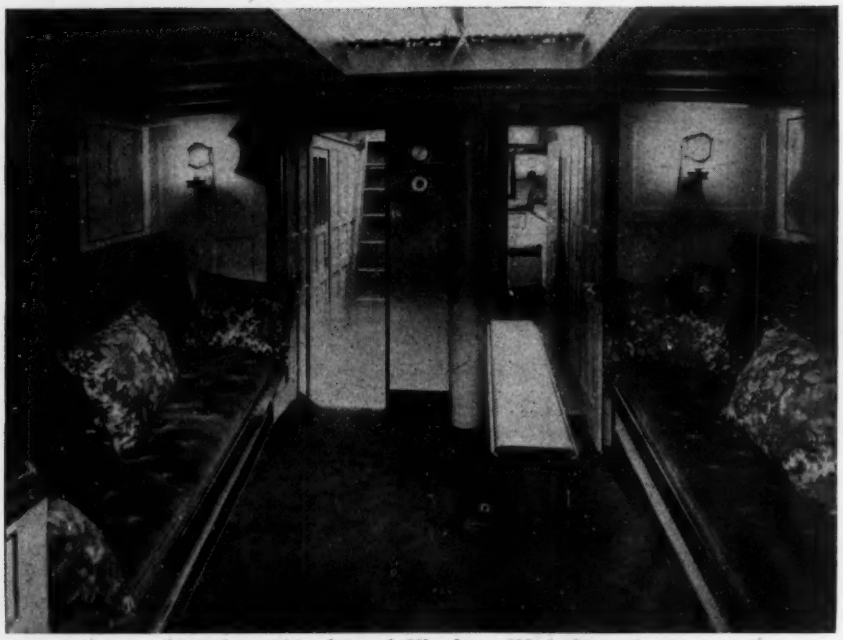
	Time	Speed
Bluenose	5:19:49	7.48
Elsie	5:30:40	7.23

(*Continued on page 307*)

Wanderer IX—A Successful Schooner

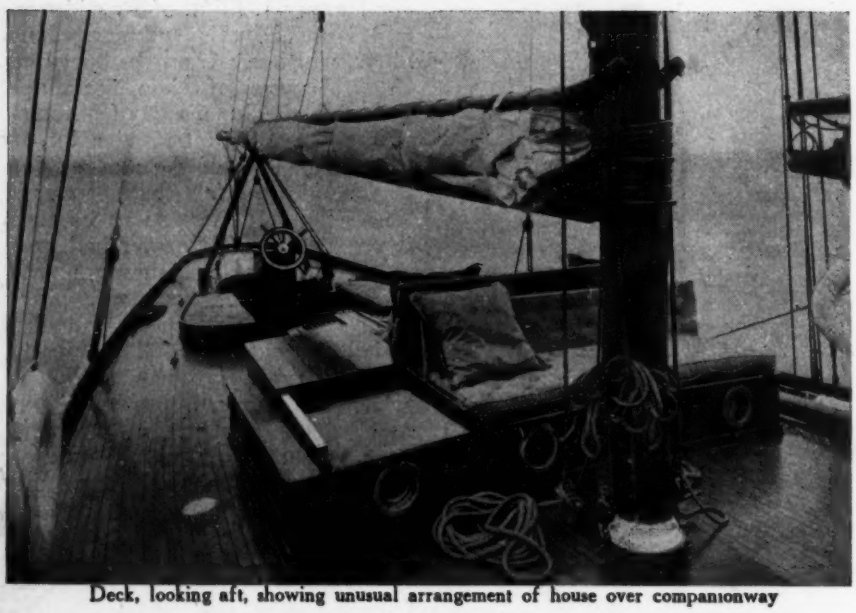
ONE of the new small schooners of the year is the *Wanderer IX*, built at Riverside, R. I., for Harvey J. Flint, of Providence, and launched this summer. Her plans, which are from the board of C. D. Mower, of New York, appeared in the June issue of YACHTING, where they attracted a lot of attention. One of the reasons for this, besides the fact that she was a fine, wholesome boat, was because in her design Mr. Mower had produced the popular fisherman type without losing the "yachty" appearance or sacrificing speed or looks. Below the water she follows closely the best type of fishing schooner, while her ends are lengthened out and refined, though still retaining the necessary buoyancy, so that they eliminate the stubby, chunky appearance frequently seen in out-and-out fishermen.

The yacht has a pole-masted



Attractive main saloon of *Wanderer IX*, looking aft

After stateroom of *Wanderer IX*



Deck, looking aft, showing unusual arrangement of house over companionway

schooner rig of about 1,822 square feet. She is 44 feet long on the water, 63 feet over all, 15 feet beam and 8 feet draught. She has a large double stateroom aft, a main saloon amidships and a passage between the two from which the companionway leads to the deck. In the center of this passage, behind removable bulkheads, is the engine for auxiliary power, while on the starboard side is a locker room so large as to contain a pipe berth for sleeping, and on the port side is a large and well-equipped toilet room. How attractive she is both below and on deck is shown by the accompanying pictures, which have only recently been taken.

As to how she handles, and how successful she proved, we'll let the owner tell this himself. Mr. Flint has been known for many years on Narragansett Bay as a keen racing man, and this is the ninth yacht he has owned which has borne the name of *Wanderer*. Here is what he says in answer to our letter asking how the boat handled:

"About the *Wanderer IX*. As a cruising proposition I do not see how she could be beaten. She has an improved George's Banks underbody, which gives her a lot of buoyancy and sea ability. Her top sides were 'Mowerized,' so that I think she is a sweet-looking craft.

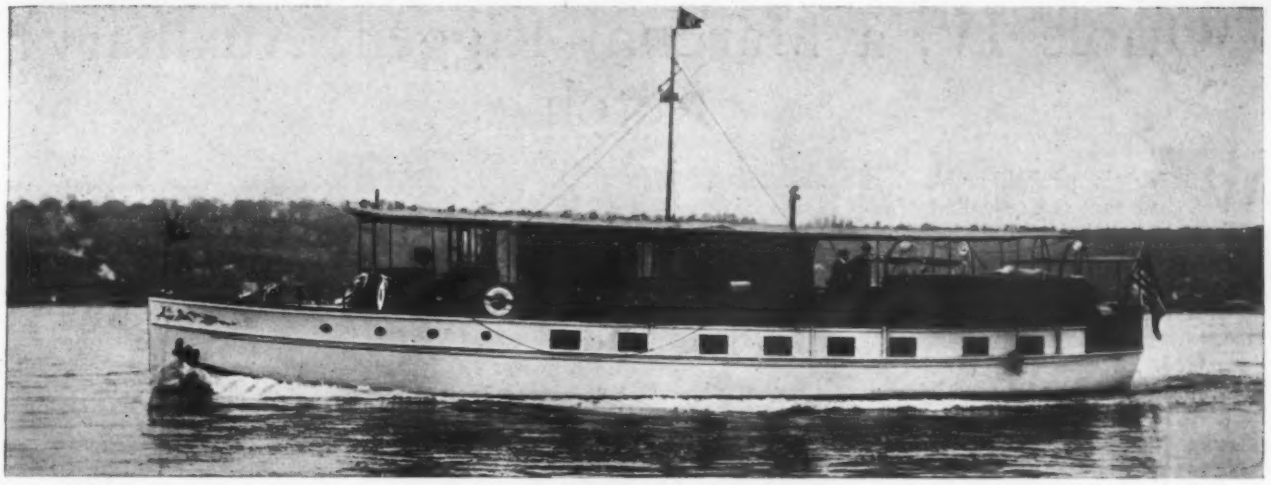
"She handles beautifully. You can steer her with one finger in a deck breeze. I think she is the best-balanced boat I ever handled. Considering her small sail area, she is very smart. We ran from New London Harbor to Dutch Island Harbor in four hours. We had a fair breeze and a fair tide, but even so the time was pretty good. She handles splendidly under mainsail and head sails, or, if there is sufficient wind, under foresail alone. We sailed through a sixty-mile thunder squall this summer with only the foresail. Her angle at heel was about half way down to the deck. We beat to windward in this squall up into a cove and anchored.

"She has a motor, which came in handy in several calms.

"Summing up, would say she is good looking, able, comfortable, quiet and fairly fast. Mower has given me the best boat by far that I have ever owned, and if I was going to build again there isn't one thing that I would change."

Irwin IV—A New Type of House-Yacht

A new power "house-yacht," built by the New York Yacht Launch & Engine Co., of Morris Heights, this year for Julius Heil-



Irwin IV, a motor "house-yacht," designed and built by the New York Yacht, Launch & Engine Company

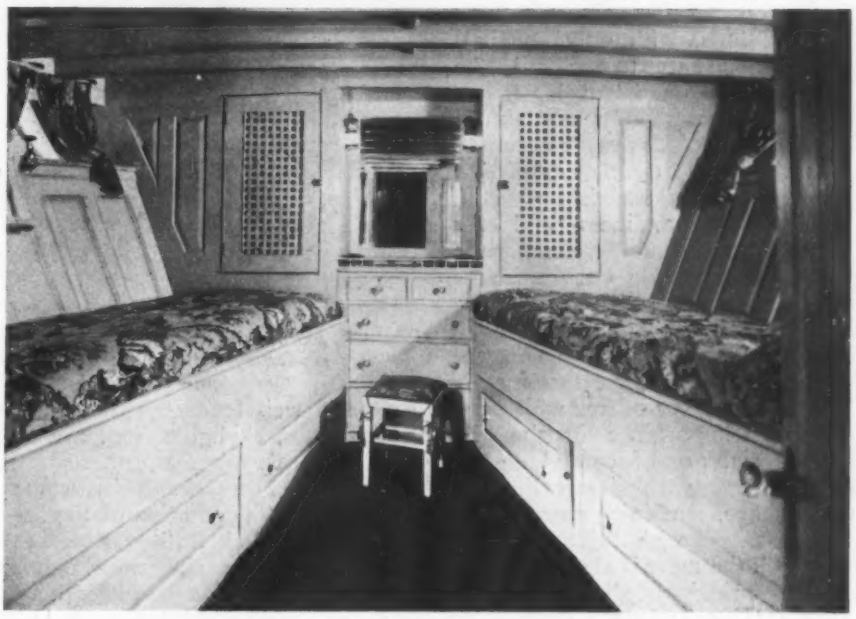
ner, of New York City, is the *Irwin IV*. The boat is unusual in a number of ways, and after three months' cruising in her Mr. Heilner reports that she has given excellent satisfaction in every respect.

While having all the features and good points of a house boat, in appearance and speed she is a power yacht, with all of its advantages. She is 73 feet over all, 17 feet beam and 3 feet draught. The hull is of very heavy construction, and the interior is paneled throughout, part in mahogany and part in white pine below deck, with a deck house of mahogany inside and outside. The owner's accommodations consist of four large staterooms, two bath rooms, a saloon below deck, with deck house and pantry on deck. The galley is between the owner's quarters and engine room below deck, the crew's quarters being abaft the engine room.

The boat is equipped with two 4-cylinder 6½-inch by 8½-inch 20th Century motors, giving a speed of between 11 and 12 miles per hour. The gasoline tanks have a capacity of 800 gallons, and the water tanks hold 850 gallons, the water being supplied to all fixtures by gravity from gravity tank on deck, which is kept filled by automatic pump in engine room.

The electric plant is a Universal 110-volt outfit, with Edison batteries giving a generous lighting equipment throughout. The furnishings are in excellent taste, all being laid out to make the boat homelike and comfortable.

The model of this house-yacht was on exhibit at the Motor Boat Show last year. The house-yacht in its complete state is an extremely handsome craft, as shown by the photographs of her, taken after she was commissioned.



Forward double stateroom of *Irwin IV*

The deckhouse makes a most attractive saloon

Oriole IV, a Marconi Rigged, Auxiliary Ketch

WHAT is probably the first time that the so-called Marconi or jib-headed rig has been applied to a large cruising ketch is in the *Oriole IV*, a new cruising yacht 60 feet on the water, designed by Geo. Owen of Boston, for Commodore Geo. H. Gooderham, of Toronto, Ontario. The yacht, which was built last spring and which has just finished her first season's cruising, has many points of interest to yachtsmen, but chief of these is, probably, her rig. This embodies the acme of simplicity, and in a boat 93 feet overall there are only three working sails, with only one halyard and one sheet to each. As the jib is sheeted on a traveler it can be appreciated readily how simple the handling of the yacht becomes. This rig on the *Oriole* has proved itself extremely satisfactory both for general handiness and for safety in offshore cruising, the yacht having made one cruise of 2,000 miles soon after she left the builder's yard. The spars are all hollow, being made by Pigeon, the mainmast being about 110 feet in length. The spreaders, which are of great importance in the jib-headed rig, are of special design, being hollow with stream line exterior shape, combining strength and lightness. The photographs show how well the mast is stayed.

The principal dimensions of *Oriole IV* are: length overall, 93 feet; L. W. L., 60 feet; beam extreme, 19½ feet; draught, 9 feet. The yacht is built of steel, the frames and deck beams being of steel angles and the plating of steel averaging ¼-inch thickness. There are several steel bulkheads in addition to web frames, while deck, deck-houses, skylights, etc., are of Rangoon teak.

The tall, narrow rig of *Oriole IV* proved very satisfactory for off-shore work

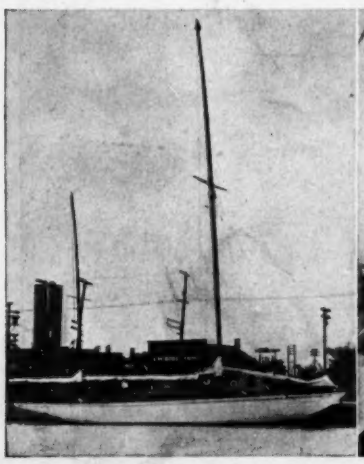
The model of *Oriole IV* is a fine example of the operation of the so-called Universal Rating Rule, as she is virtually a racing model under that rule, with minor modifications, such as lengthening the keel, lessening the draft and increasing the freeboard of the racing boat in order to adapt her to cruising proportions. *Oriole IV* proves that the Rating Rule boat can be made a beautiful, able and seaworthy cruiser.

The engine room is located aft and is unusually large and well planned for a yacht of this type, where, as a rule, the engine is stuck away in some extremely inaccessible position. The room contains also a complete electric lighting set and an electrically-driven bilge pump. The main propelling engine is a 6-cylinder, 54 H. P. Standard motor which turns a 38-inch by 38-inch propeller at 350 R. P. M., which gives her a sustained speed of slightly over 8 knots, which is very good for a boat of this size.

The owner's quarters consist of three staterooms, and a very large main saloon. The galley is also large and is fitted with Shipmate range to which is attached a hot water tank.

Some account of the first trip of the yacht (which might also be called her trial trip) from Neponset, Mass., where she was built by Lawley, to Toronto, should prove interesting. On board during the trip were Commodore Gooderham, the owner, "Jim" McMurray, of Toronto, well-known to all Canada's Cup contenders, Sydney A. Beggs, Rear-Commodore of the Corinthian Yacht Club, Walter C. Wood and George Owen. This was an afterguard that would be hard to beat. In addition there were Capt. G. A. Strahan and a crew of five men.

The yacht left Neponset, July 2nd, making a short run to Marblehead that afternoon. The next day, the 3rd, was spent in adjusting the compass and taking aboard stores, the real departure for Toronto being made that afternoon. A fast run was made across the

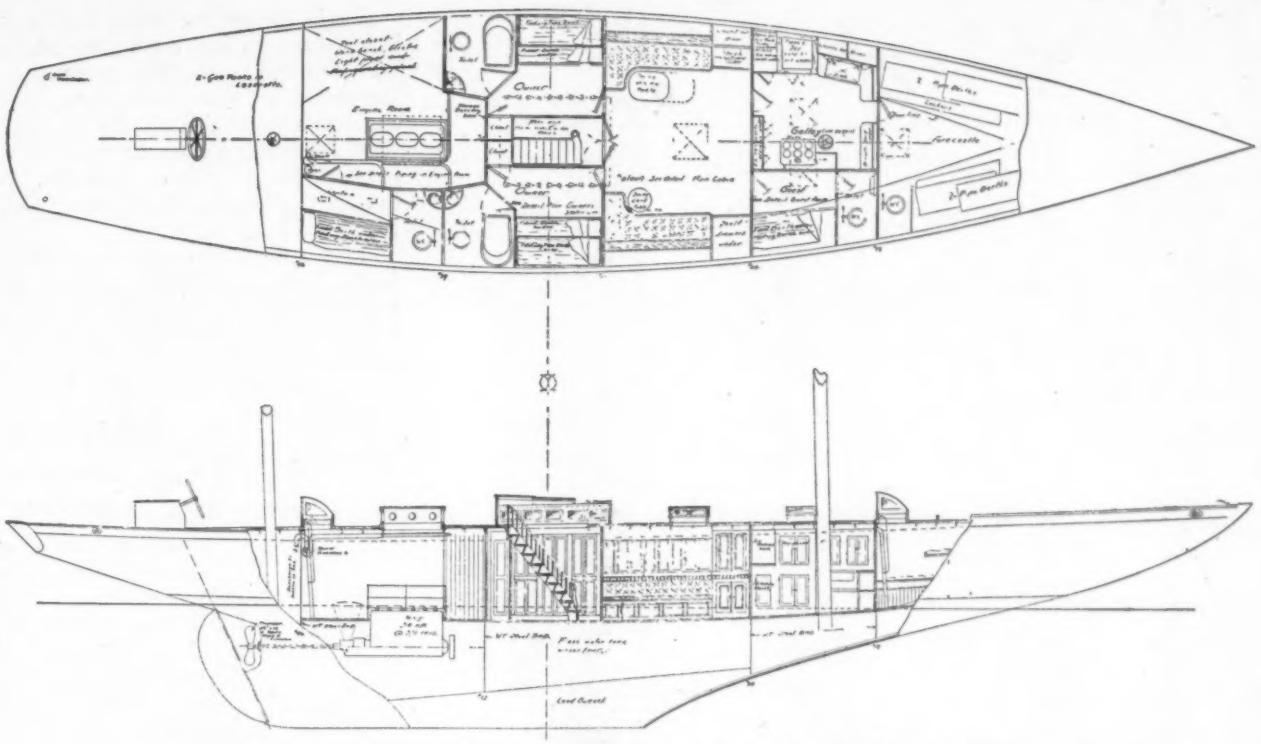


Oriole IV in Lachine Canal

Close hauled

Sydney Beggs shooting the sun

Commodore G. H. Gooderham



Accommodation plan and inboard profile of 60-foot cruising ketch *Oriole IV*, designed by George Owen

Gulf of Maine and down the Cape Shore, with strong southwest winds prevailing, the first stop being at Hawksbury in the Strait of Canso, which was made on the morning of July 7th. Gasoline and stores were taken aboard here and Charlottstown was reached on the afternoon of the 8th. The next stop was an anchorage under the shore at Cape Magdalene, in the Gulf of St. Lawrence, on account of thick weather.

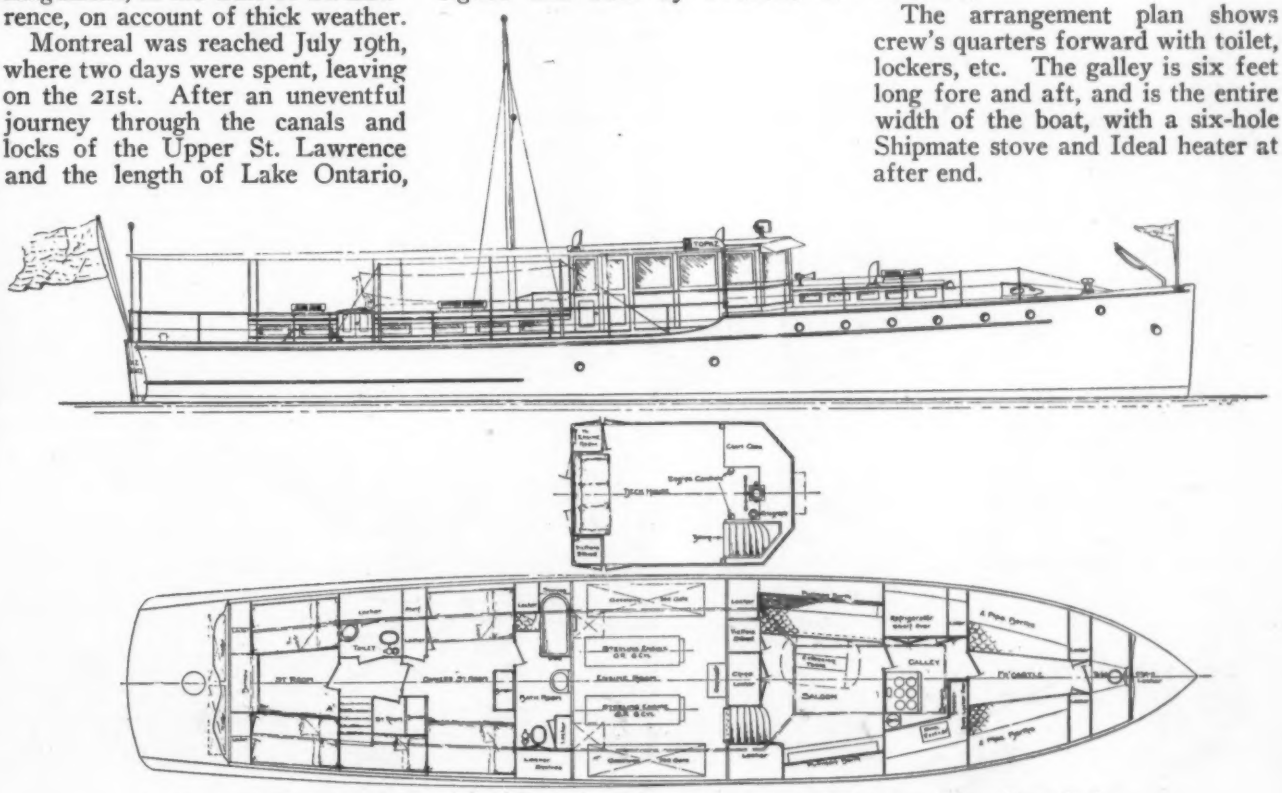
Montreal was reached July 19th, where two days were spent, leaving on the 21st. After an uneventful journey through the canals and locks of the Upper St. Lawrence and the length of Lake Ontario, *Oriole IV* reached Toronto on July 24th, an unusually fast passage for the 2,000 miles. The entire voyage was made without parting a rope yarn or an accident of any kind.

A 77-foot Power Cruiser

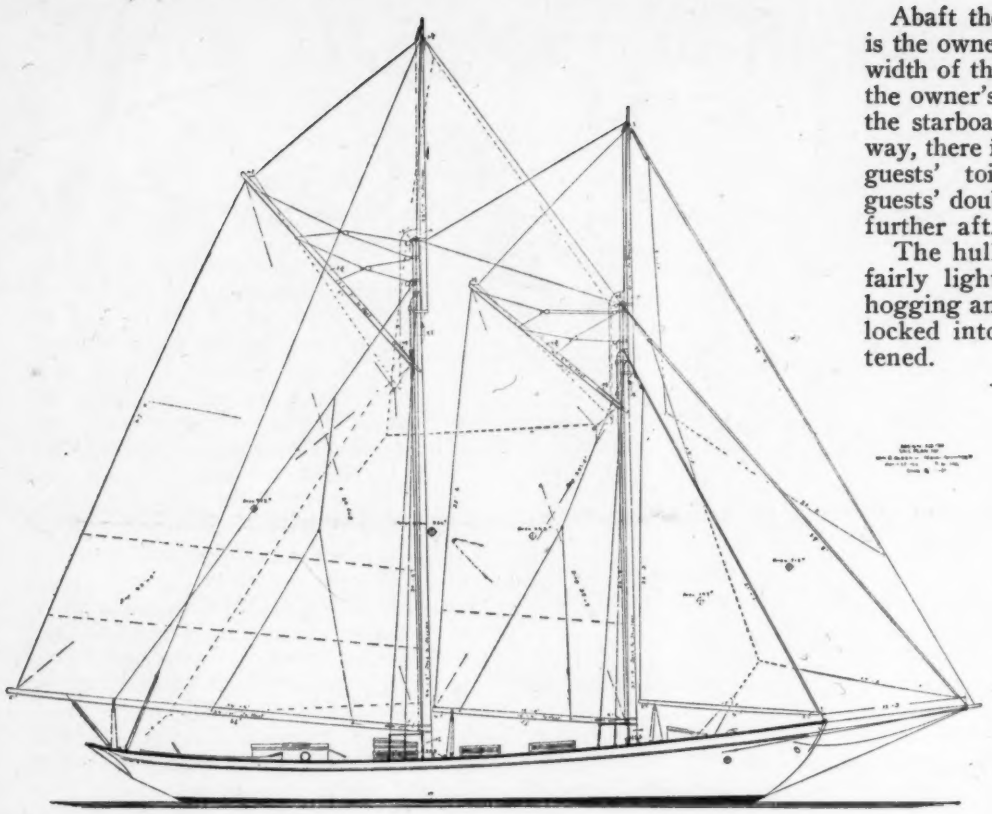
Topaz is a new power cruiser of an interesting type recently designed and built by Frederic S. Nock, East Greenwich, R. I., for J. Richmond Fales, of Providence, R. I. Her general dimensions are: L. O. A., 77 feet, 8 inches; L. W. L., 76 feet; breadth extreme, 15 feet, 2 inches; draught extreme, 4 feet.

Her power plant consists of two 6-cylinder GR Sterling engines, turning propellers 24 inches diameter by 18 inches pitch up to 1450 R. P. M.

The arrangement plan shows crew's quarters forward with toilet, lockers, etc. The galley is six feet long fore and aft, and is the entire width of the boat, with a six-hole Shipmate stove and Ideal heater at after end.



Topaz, a new 77-foot power cruiser, designed by F. S. Nock for J. Richmond Fales, of Providence, R. I.

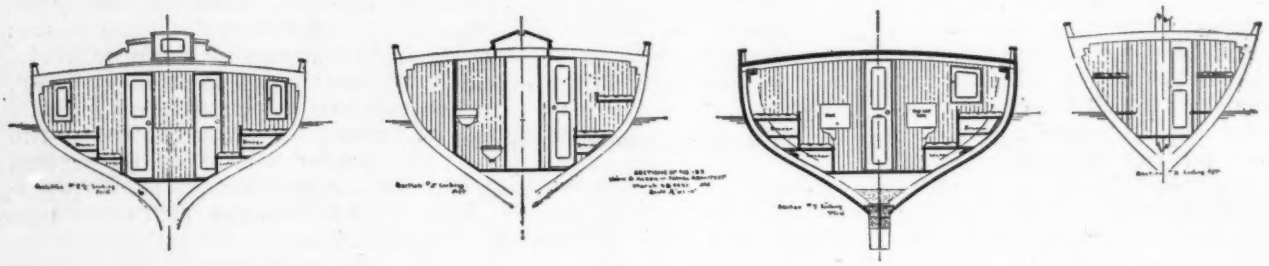


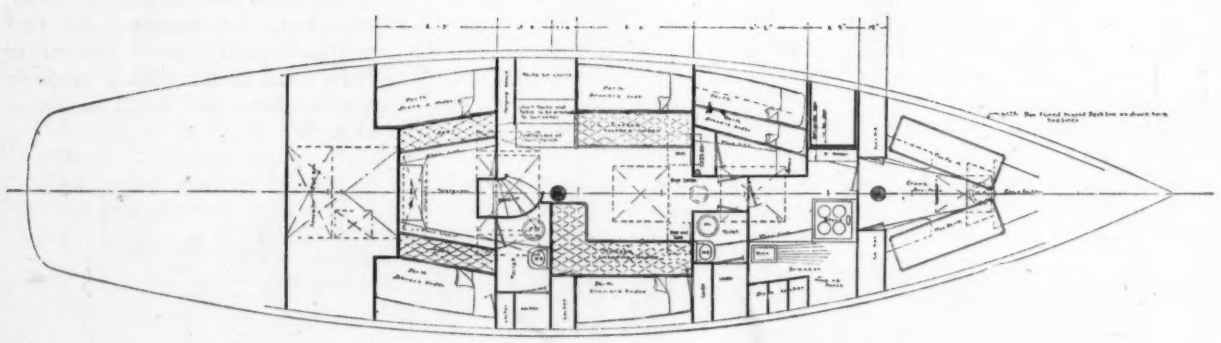
Abaft the engine room bulkhead is the owner's bathroom, the entire width of the boat. This opens into the owner's double stateroom. On the starboard side, off the passage way, there is a single stateroom and guests' toilet room opposite, a guests' double stateroom being still further aft.

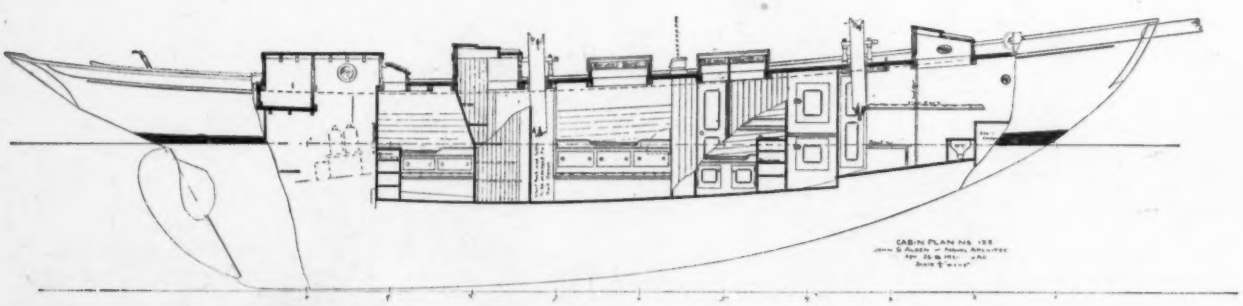
The hull is truss construction, fairly light but very strong, all hogging and truss members being locked into frames and well fastened.

A Fisherman Type Auxiliary Schooner

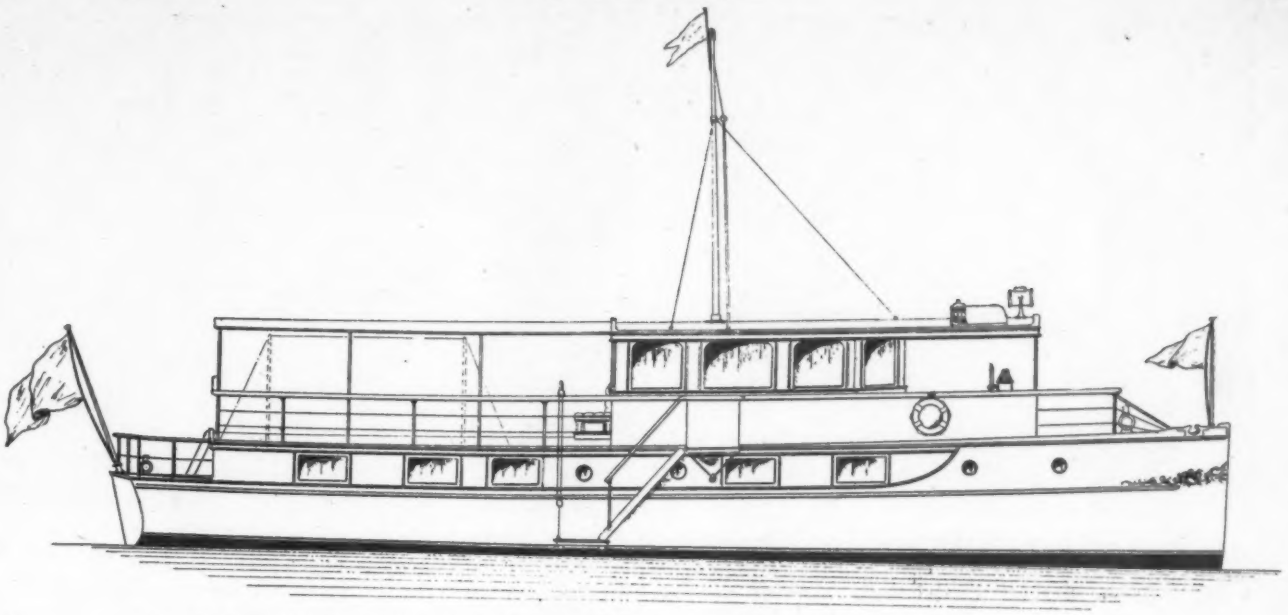
Another cruising schooner of the fisherman type is being built this winter by Charles Morse of Thomaston, Maine, from designs by John G. Alden of Boston, testifying to the rapidly growing popularity of this







Plans of 62-foot overall auxiliary schooner of fisherman type, designed by John G. Alden for Dr. Austen F. Riggs



An attractive 60-foot motor houseboat whose proportions have not been spoiled by her comfortable deck house

type. The new yacht has all the earmarks of the fisherman, with good sheer, moderate but graceful ends, and good dead rise to the sections. Although only 62½ feet in length overall, the boat has a flush deck with some 6 feet, 4 inches head room below, under the deck beams. Her other dimensions are length L. W. L., 48 feet, 6 inches; beam 15 feet, 6 inches; draught, 8 feet; sail area, 1824 square feet.

She differs in rig from the modern tendency in boats of this size in that she has fitted topmasts, topsails, and carries a fisherman's staysail. There is a lot of room below, as the plans indicate, including a large double stateroom, a main saloon, opening off of a vestibule which is used as a chart room, and a single stateroom forward.

The engine (for she is auxiliary) is located aft in a compartment separated from the other quarters by a bulkhead, the entrance being through a small house just forward of the cockpit well. It is a 2-cylinder, 4-cycle motor. The boat is being built for Dr. Austen F. Riggs of Stockbridge, Mass.

A 60-Foot Motor Houseboat for Florida Use

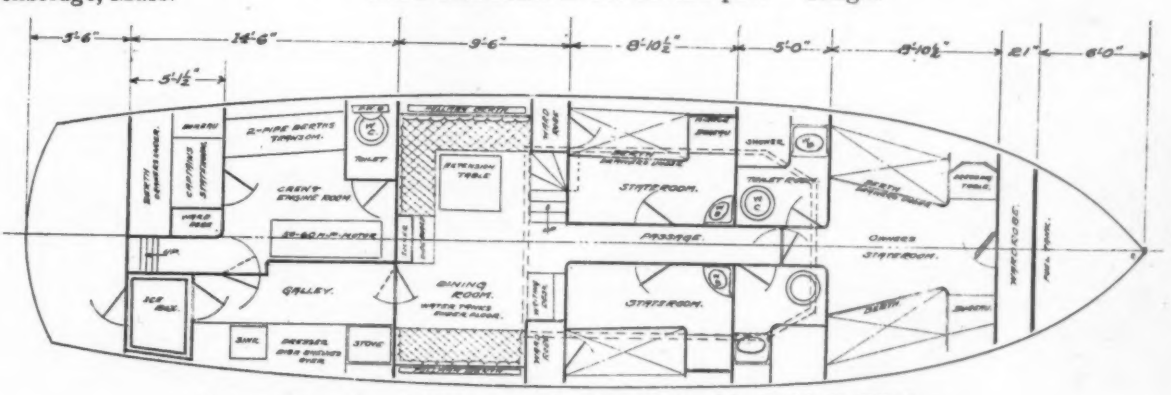
The accompanying plans are of a very attractively arranged, 60-foot houseboat, with owner's quarters forward, and crew and machinery aft. She is not too large for economical operation, yet she has plenty of room and comfort. Two guest staterooms with berths, clothes closets, drawers and wash basins, are provided, together with toilet room fitted with shower. A large owner's cabin is forward, fitted with two berths, large wardrobe, dressing table, bureau and private toilet room with shower.

The dining room is at the after end of these quarters, the full width of the ship, and contains two Pullman berths, sideboard and desk. The galley is conveniently situated on the starboard side aft, and has a large dresser, stove, sink, ice box, shelves, etc. It is bulkheaded off from the foc's'le and engine room, on the port side, containing two pipe berths and toilet. A captain's stateroom is aft on the port side with stairs to the after deck on the same side.

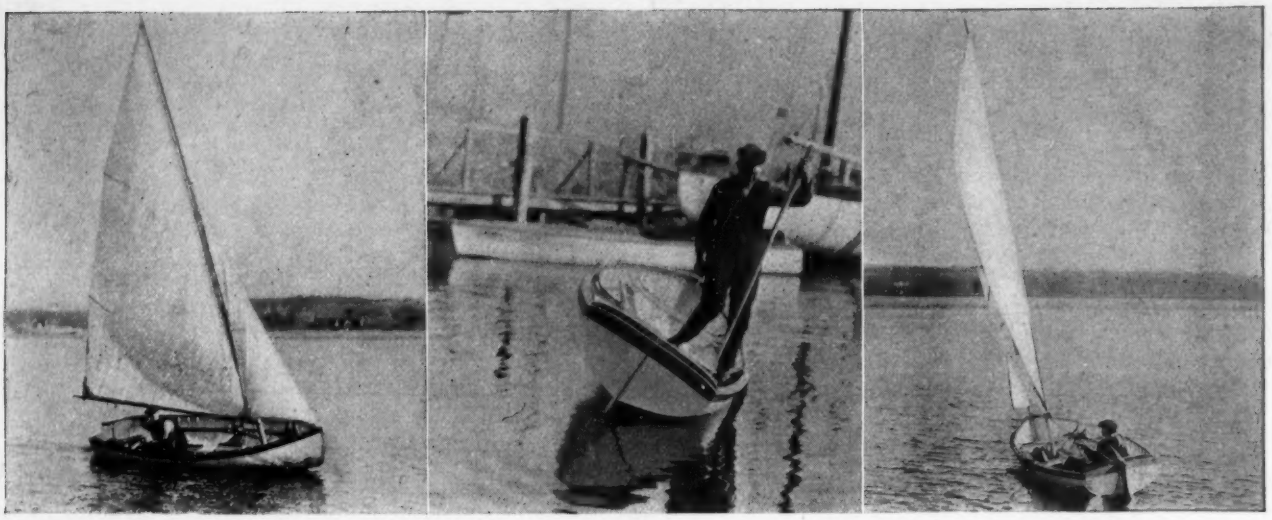
The engine room is designed to contain a 50-60 H. P. heavy duty motor which will give a speed of from 8½ to 9½ miles per hour. Two hundred gallons of gasolene and three hundred gallons of water are carried.

The deck arrangement gives the maximum of space. It has a glass protected steering shelter, with doors to forward deck, while this space can be fitted with side curtains and in bad weather will thus be very comfortable. The deck saloon is very commodious, almost 16 feet long, and is fitted in wicker.

An after deck of over 20 feet clear space is provided, as well as a small quarter deck for the crew. Two twelve-foot tenders will be carried, two windlasses are provided, forward and aft, and the design in general has well balanced groupings of superstructure into a very pleasing and yachty looking boat which is a credit to the office of Ralph E. Winslow of Atlantic, Mass., who is responsible for the design.



Accommodation plan of 60-foot motor houseboat designed by Ralph E. Winslow



The Essex Jolly Boat is a 13-foot sailing tender with Marconi rig, that is fast, roomy and has great stability

The Essex Jolly Boat—A Sailing Tender

The Dauntless Shipyard's new boat for next season's sailing is called the Essex Jolly Boat. It is a sailing dinghy that is easy to row, sails fast, costs little to own, and has a high Marconi rig. Too many times in a busy lifetime of sailing has E. N. Way, designer of the Dauntless yard, been becalmed below high banks which shut off the light airs of the upper currents, and so the new little ship has a towering rig that reaches well up where the breezes blow, that makes the sport of sailing take on a new zest. The Jolly Boat spells fun.

This newest creation carries nine full grown persons. There is photographic evidence that nine persons can be carried in the Jolly Boat with a fine ribbon of freeboard left to show above the water line.

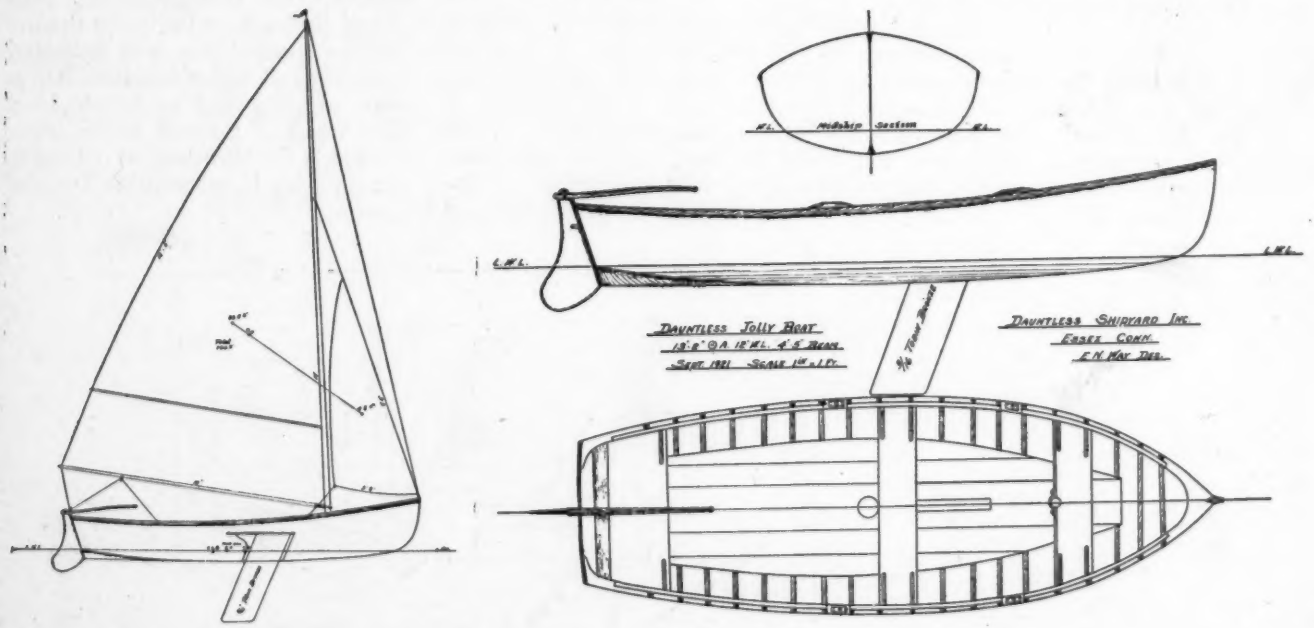
There is a real need for a yacht tender dinghy that can be carried on davits and easily lifted out of the water, which will carry a heavy load, sail close to the wind and be faster and handier than the ordinary sharpie or sneak box and less costly than the Herreshoff "Dough Dishes" or the "Essex Class" boats. Economy was effected from a reduction of size and weight of the boat rather than by cheapening the construction.

The specifications call for clear white cedar planking in full lengths: frame, white oak; rail, clamp, transom and stringers, mahogany; seats, white pine; floor boards, cedar. All fastenings are either copper or brass. The seats, rail and floor boards are finished bright, and the rest of the boat is painted white inside and out. The rudder is mahogany, fitted with tiller and yoke for sailing or rowing, and locks in place, but is removeable with one hand by an ingenious device.

There are three seats for rowing and over five feet length of cockpit for sailing. The centerboard is a Tobin bronze plate of dagger form with three positions: full down; up to clear boom; full up but just extending enough below bottom to protect rudder. When used as a row boat the dagger lifts out the boat and is replaced by a mahogany cap pinned in place to prevent filling the boat when towed.

The boat is exceedingly stable, and as a yacht tender she will be appreciated from the fact that all projections which might do injury by getting under the counter have been avoided. A 200 pound man can balance himself on the rail.

The Marconi mast weighs but 15 pounds and is 20 feet high. It is stepped in the after side of the forward thwart, with a brass half ring to permit easy stepping and unshipping. The main boom extends to the taffrail, and a light wire fore-



stay is hooked into the stem head and can be quickly detached. The lug mainsail hoists by a single wire halyard and runs on the usual track.

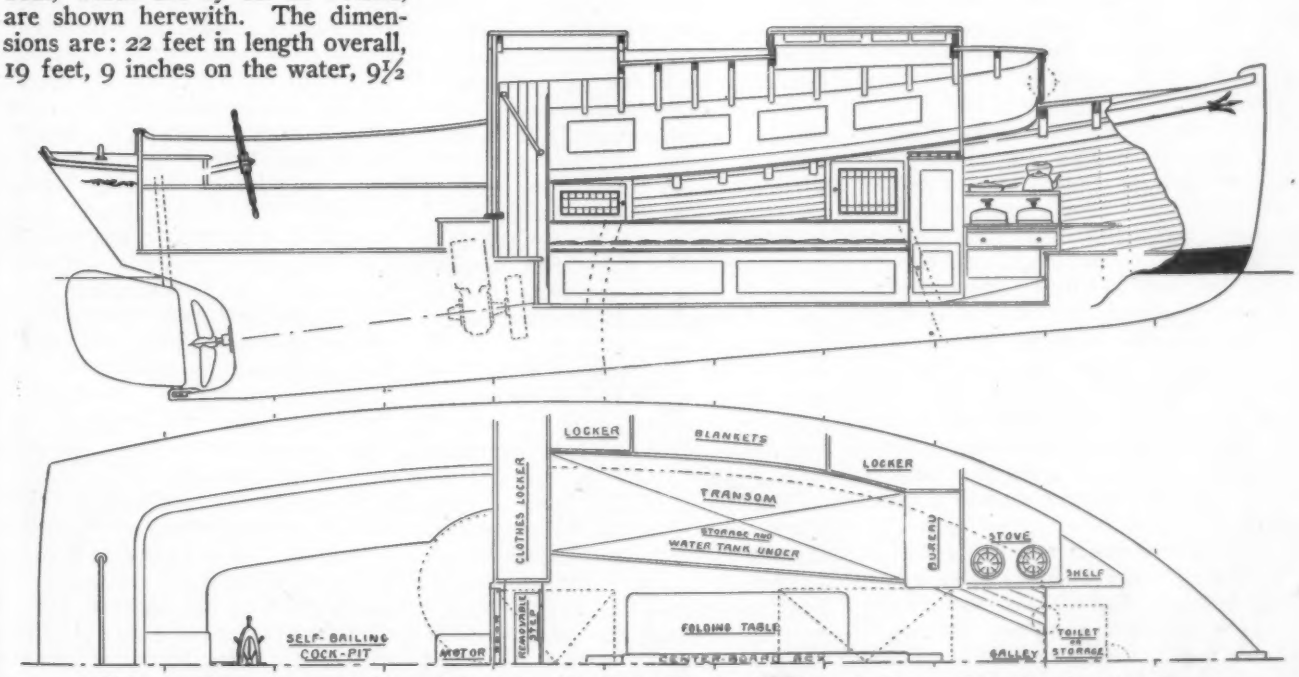
Dimensions are 13.2 feet overall length; 12 feet waterline, 4 feet 5 inches beam; sail area, 100 square feet. Wilson & Silsby, of Boston, have cut a smart set of sails for her.

The Dauntless Shipyard, Inc., have provided template equipment sufficient to complete Essex Jolly Boats to exceed one complete boat a day, a factor that will insure a low cost for the boat.

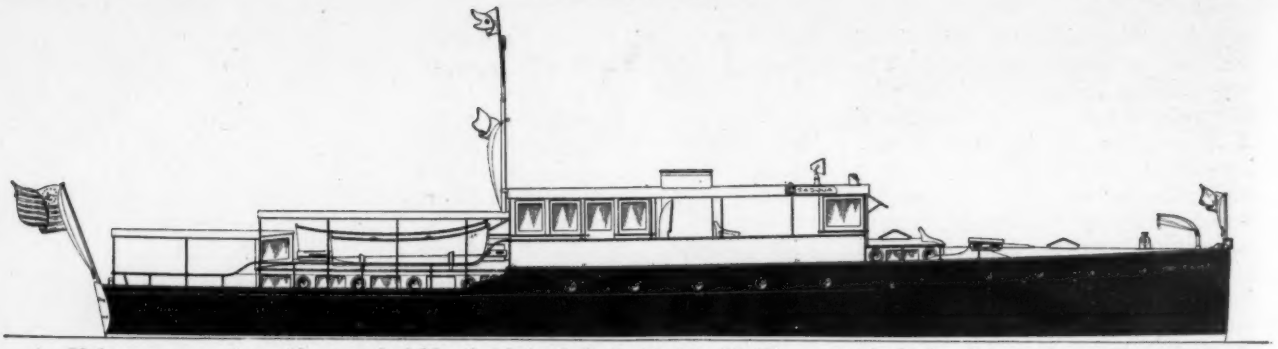
A 22-Foot Marconi-Rigged Cat Boat

One of the most wholesome and able types of small boat developed in this country is the Cape Cod Cat. Although originally native to the waters south of Cape Cod, and in the neighborhood of Nantucket and Buzzard's Bay, the type has found favor wherever men wanted a roomy, comfortable craft for rough water that was "all boat," and where the cost of building did not include the long overhangs that were of no use as far as comfort went.

So the well-designed catboat has always had considerable vogue, and a new one that has just been put out by the Toppan Boat Manufacturing Company of Medford, Mass., will surely attract a lot of attention among those who know a real boat when they see one, because she embodies all of the up-to-date features, including a Marconi rig which has many points to recommend it in a boat of this type. The plans of this boat, which are by H. L. Friend, are shown herewith. The dimensions are: 22 feet in length overall, 19 feet, 9 inches on the water, 9½ feet beam, and 2 feet, 3 inches draught. She has a transom stern which replaces the straight stern originally found in cats with a big barn door of a rudder hung on the outside, the rudder in this case working through a rudder port with a wheel steering gear. The boat has very easy lines, and she should not only sail well, but should be particularly good under both sail and power, or under power alone.



A 22-foot auxiliary catboat with Marconi rig, designed by H. L. Friend and built by the Toppan Boat Manufacturing Company



An 89-foot express cruiser with a speed of 20 miles, being built for De Ver H. Warner by the Luders Marine Construction Company

The generous beam makes for stability, seaworthiness and general comfort. A feature that will be appreciated is the self-bailing cockpit, which not only makes a safer boat, but does away with pumping after every rain.

The cabin is unusually commodious, with plenty of locker space, a well arranged galley, folding table and all the features that make for comfort. The motor is installed at the forward end of the cockpit under a removeable hatch which does not in any way interfere with the cockpit or with entrance to the cabin.

The Marconi or jib-headed rig is a feature that will be appreciated. The high, narrow sail with the boom well inboard makes a well balanced rig and prevents the tendency to gripe which is common with cats with boom way outboard. Gaff rig can be had if preferred and with this rig and plain finish the boat can be turned out for about $1,300.

A New 89-Foot Fast Power Cruiser

After a most successful season with his 58-foot twin-screw express cruiser *Lucetta*, designed and built by the Luders Marine Construction Company, her owner, DeVer H. Warner has commissioned the Luders Company to build him a new boat approximately 90 feet in length and to have a speed of 20 miles an hour. This was a somewhat unusual problem, as it was to be coupled with extreme seaworthiness and comfort. The completed design shows that the new boat is 89 feet in length, 15 feet beam, 4 feet 4 inches draft. She has twin screws and is to be powered with a pair of eight-cylinder Winton engines which will give the desired speed when turned at 850 revolutions.

The new yacht will be most substantially constructed, with long deadwoods that will keep her steady in a seaway, generous freeboard and with a raised deck running well abaft amidships. The frames are closely spaced bent oak and planking of double yellow pine. There will be a steel bulkhead at each end of the engine space, and a collision bulkhead at each end of the boat. Gasoline tanks of about 1,500 gallons capacity will be located amidships. The water tanks are at the ends of the boat in order to distribute the weights.

To describe the accommodation plan briefly, starting from the bow, where there is a chain locker, the forward compartment contains the crew's toilet followed by a forecastle having accommodations for four men. Abaft this, there will be a room for the captain and one for the engineer. Then comes the galley, extending the full width of the boat, and abaft this is located the dining room. This location of this room simplifies the problem of serving both the crew and owner, as both quarters are most convenient to the galley.

Then comes the engine room, of particularly generous proportions. The after quarters contain two double staterooms, followed by toilet rooms with shower to port and starboard and a 9-foot living room in the after part of the boat which in turn leads out to a generous cockpit. From this after cabin there is a passageway leading forward with a stairway to a deck cabin which is located at the after part of the raised bridge. This room is about 10 feet square, and in addition to having a deck lounge is a most desirable place for serving meals in pleasant weather. A feature of the boat is that the entire length of her can be traversed under cover. Special arrangements for sleeping are made in both the saloon and dining room so that if desired there is ample sleeping accommodations for six people.

The finish of the boat is shipshape. Teak and mahogany will be the woods used for the deck house, hatches, rails, etc. Particular care has been taken in order not to present any more brass than is necessary, in order to reduce the labor problem to the minimum.

A. P. B. A. Changes its Ruling on Cash Prizes

At the last meeting of the A. P. B. A., held in New York, an important change in the rule governing racing for cash prizes was made which will, we believe, assure a larger number of entries in sanctioned races of the Association. A good deal of misapprehension prevails concerning this change, according to articles that have appeared in print and which stated that the A. P. B. A. would permit competition for cash prizes in its sanctioned races. This is an error. What the Power Boat Association has done is to amend the rule which prevented those that had raced for cash prizes at any time or in any other association, from taking part in sanctioned races in the A.P.B.A. Hereafter, while no A. P. B. A. races will be for cash prizes, those that have raced for cash prizes under the auspices of any other association will still be allowed to participate in A. P. B. A. events.

This is undoubtedly a liberal interpretation of the rule governing Corinthianism. We still believe, however, that the A.P.B.A. is right in not authorizing for its own events races for cash prizes. In spite of all that may be said about the necessity of giving cash prizes and the contention that boat owners will not race without them, cash prizes are not in the best interests of the sport. Such races place winning and the value of the prize above racing for the games' sake. Sport built on these lines is never clean, is always subject to abuse and will in time degenerate to the same plane as horse racing or professional track athletics. It has not been found necessary to offer cash prizes for sailing races, yet sailing events, wherever there is any sailing, always attract a great many more entries than power boat races. Two hundred and thirty-eight starters in one day's event at Marblehead, and an average of over 100 a day at Larchmont Race Week, is a record that no power boat race has ever reached.

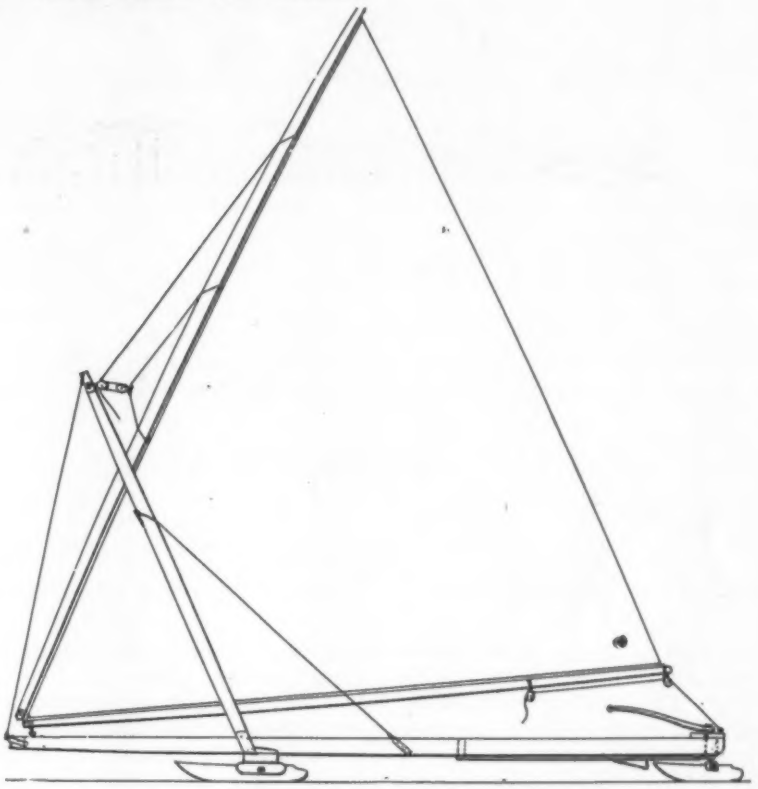
Building an Inexpensive Ice Boat

By CHARLES H. HALL

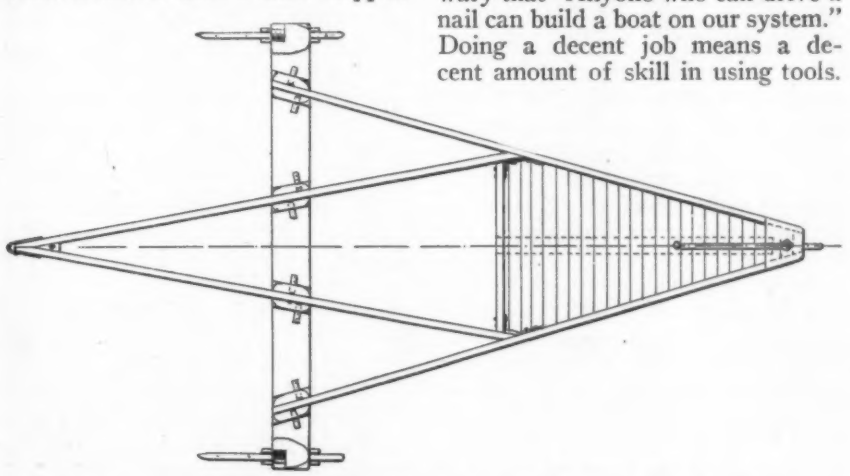
THE mile-a-minute ice boat, with every ounce of unnecessary weight abolished, with a hollow backbone and all the modern refinements, is rather an expensive toy. The average mortal, who can give but litle time to the sport, will find that such ice boating comes too high for these days of economy. One man, some years ago, said that he had to give up the pleasure of whizzing over the ice, for his figures showed that it was costing him about fifty dollars an hour! He had a small boat, the upkeep of which was about a hundred dollars a season, and he had had but two hours on the ice during the whole winter. And that was a good many years ago, when things cost a whole lot less than they do nowadays.

Of course, if the limit of speed is wanted, or racing is the object, the lightly built racing machine is the only thing, but a lot of fun may be had on the ice with a much less expensive craft which will satisfy the speed craving of all but the most exacting. Therefore, the design of the boat we give here, which will carry three or four persons, has been worked out with the idea of making her cheap and easy to build. The ironwork has been kept as simple as possible, the only real forging demanding any particular skill being the rudder stock. The rest of the ironwork may be bought at hardware store or ship chandlery, or is a bit of simple work that may easily be done by the local blacksmith.

In the conventional type of boat the sloop rig is almost the only one used. In spite of its merits it was rejected for the present design because it has to have a mast stepped on the center line, and this means a stiff backbone and a stout runner plank. By using the lateen rig, with a sheerpole pair of masts, the thrust of the masts is brought outboard, almost over the side runners, the runner plank may be lighter and the backbone is eliminated, or, rather, replaced by two light side stringers which weigh no more than the ordinary backbone. The boat is not too much of a job for an amateur to build, though some knowledge of the use of tools is necessary. Don't believe the folks who tell the unwary that "Anyone who can drive a nail can build a boat on our system." Doing a decent job means a decent amount of skill in using tools.



Plan of ice boat of simple construction and inexpensive to build, with 200 square feet sail

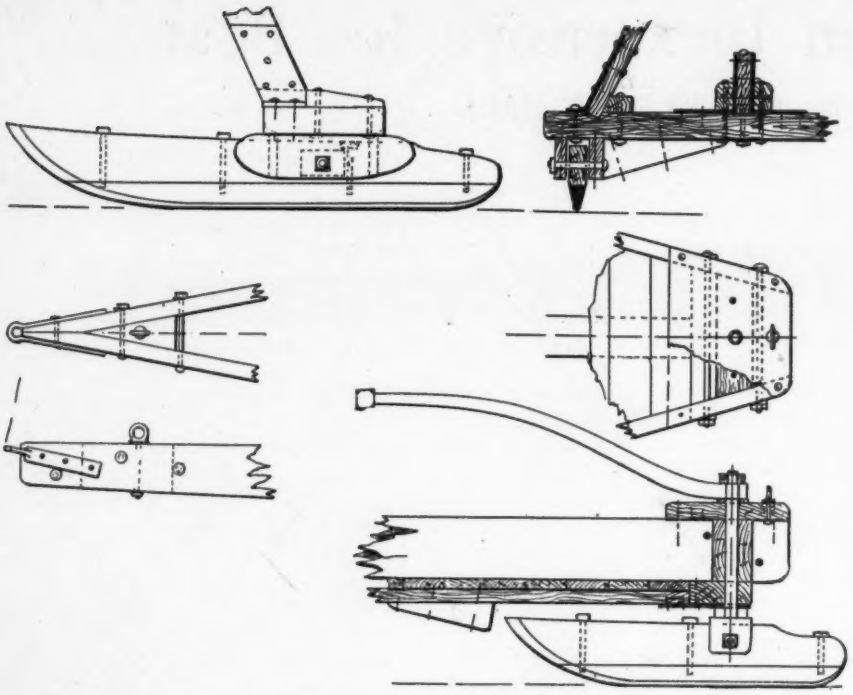


Plan of easily built ice boat showing construction of runner plank and side stringers

It takes a certain measure of practice even to bore a hole—and get it in exactly the right place and in exactly the right direction through the wood. But only a few tools will be needed for building this little ice boat and the amateur has them in his kit if he is anything of a carpenter.

Most of the principal fastenings are carriage bolts. These have a shank square under the head and a flat round head that is neat and shipshape. The nut should be set up tight and the ends of the bolt riveted over or drilled for a cotter pin to keep the nut from slacking back with the constant vibration. The iron shoes of the runners are of a special grade of soft cast iron. The ordinary casting will not answer. It will be better to have patterns made for them by a professional, as pattern making is an art of its own. Special shrink rules have to be used and there are all sorts of kinks about moulding that are a closed book to those who have not had experience. It takes time to get castings made, so the runner shoes should be ordered early in the game. But let's get to work!

The runner plank is of straight grained, tough ash, spruce or Washington fir. It is 12 feet long, 12



Details of runner, stem and bow iron

Details of stern, rudder and rudder port

inches wide and 2½ inches thick. Except where the side stringers cross it, the corners should be rounded off neatly. The side stringers are of clear spruce, 1½ by 6 inches and 14 and 15 feet long, two of each length. The two shorter pieces go forward. There is also a cross piece of the same size, but 4 feet, 8 inches long. Runners and runner chocks are of the best straight-grained, quarter-sawed white oak—if you can get it—and there are a few odd pieces of oak needed for bumper, chocks, filling blocks and so on. The masts are of spruce, 4 inches by 2 inches at the step, 3 inches by 1½ inches at the head, 13 feet, 10 inches long. The yard is also of spruce, 23 feet, 9 inches long and 4½ inches diameter in the slings, tapered to 2½ at the ends, carrying out the full diameter well toward the ends, making a barrel-shaped taper and not a straight one. The boom is of the same useful wood and is 19 feet, 5 inches long, 3½ inches greatest diameter and 2½ inches at the ends.

Select for your building operations a room about 25 feet long, with a level floor. Lay down a straight line on it for a center line and drive a nail a couple of feet from the wall for the forward end. Now measure 7 feet from this point and this will mark the forward end of the runner plank. Mark a center line across the runner plank and lay the plank on the floor, taking care that it is exactly square with the center line on the floor. Drive a couple of slim wire nails to hold it in position. Now measure 21 feet, 5 inches from the forward point (where the nail was driven) and drive another nail. This will be the after end. Square a line from the center line and mark a point 4 inches out on each side. This marks the outer side of the side stringers. The forward end will be 4 feet 6 inches from the center on the forward edge of the runner plank, so lay off that distance and then lay the two 15-foot pieces in position. Secure them by a few little chocks nailed to the floor, for they must not shift. Thirteen feet, 9 inches from the forward point, square out to the side stringers and mark them. This point will be the after end of the shorter side stringers, the forward end (of the inner faces) being 6 inches abaft the forward point. This will give each of them about ⅜ inch thickness at the extreme forward end. Now mark the bevels of the two ends and trim them off carefully to a neat fit. This requires careful work, but if you make a slip you can always spread the after ends a little and try again. Remember, though, that the bevels will be different if the pieces are shifted. Better get them right the first time.

Now secure the forward side stringers in position and fit the strut that goes athwartships and bevel the ends. Then make a template of the iron strap that goes in the corner where the side stringers and the strut meet and take it to the blacksmith and get the strap made. It is 5 inches wide, ¼ inch thick and 20 inches long over all. It has holes for five ½-inch carriage bolts—one in the middle and two in each end. These holes must not be in a line along the middle, but staggered up and down so that the bolts will not line up and split the wood. When the two straps are made, put them in place and clamp them while you bore the bolt holes. Then fit the bolts and set up the nuts, riveting over the ends of the bolts so that the nuts will not slack back. Then fit a wedge-shaped block, with the grain running fore and aft, between the forward side stringers at the bow. Just abaft it, bore for a half-inch bolt and for two other bolts as shown on the drawing. These had better have little tapered washers under their nuts; the heads may be let into the wood a trifle. The fitting for the jib stay may be bought or made. If bought, the bevel will almost surely be wrong and the fitting will have to be bent to shape; if made, you will have to make a template of the bevel of the inside. The bolt for the tack of the sail may be fitted. It is a ⅝-inch eye bolt, and it should have a square washer underneath, as there will be considerable pull on it.

The forward side stringers may be carried out full depth, but it will make a neater job and save a little weight if they are tapered from the runner plank forward, making them 4 inches deep at the end.

Now take your brace in hand and bore through the side bars and runner where they cross, being sure that the holes go down straight and not to one side. Keep these holes about 2 inches from the edges of the runner plank. Then fit a ⅜-inch carriage bolt in each, with the nuts underneath. Now fit a 6-inch iron knee (bought at the hardware store) on each side of each side stringer where it crosses the runner plank, securing them with flat head wood screws. Fit over them, jogging where necessary, a 2-inch by 3-inch block of hard wood. These will help the knees to keep the boat in shape and should be rounded off on top. Fasten them with through bolts—either carriage bolts or clinch bolts—5/16-inch diameter. This construction gives a solid connection between the members. The blocks need not be fitted until the after end is finished.

The stern takes a little fitting, and a neat job is the only one that will do. This is not fussiness, but the parts must fit properly to take care of the stresses on them. On top, a 12-inch piece of clear, straight-grained quarter-sawed oak, 1½ inches thick, forms the top member.

Two ⅜-inch bolts go through it and the side stringers, as shown on the detail drawing. A screw or two between the bolts will help. Then there is a 4-inch chunk of oak 6 inches wide running athwartships and carefully fitted against the side stringers. On each side of it, and just clear, is a ½-inch carriage bolt tieing the two sides together. They will need little tapered washers under heads and nuts. The after face of this oak block is 3½ inches from the after end of the boat. Underneath, with its after face flush with the after face of this block, is a 'thwartships piece of oak 2 inches thick, fastened to the side stringers with No. 18 wood screws and to the oak block and the top piece by a couple of ⅜-inch bolts.

The hole for the rudder stock goes through all three of these stern pieces and must be bored straight and true. It is 1⅜ inches diameter and is bored after all the stern is fastened together.

The cockpit floor is of tongued-and-grooved stuff of any convenient size and width. It may be ⅞-inch pine or spruce or ⅜-inch hard wood. It is screwed to the side stringers and to the strut piece at the forward end. Under it, along the center line, is fitted a stiffening piece of spruce 4 inches by 1¼ inches. This piece is through-fastened to the strut piece forward and its after end is supported by a 3/16-inch iron plate on the under side of the bottom 'thwartships piece at the stern, being fastened with No. 14 wood screws. The principal function of this piece is to stiffen the cockpit floor and to carry the wedge-shaped oak bumper shown just forward of the rudder runner.

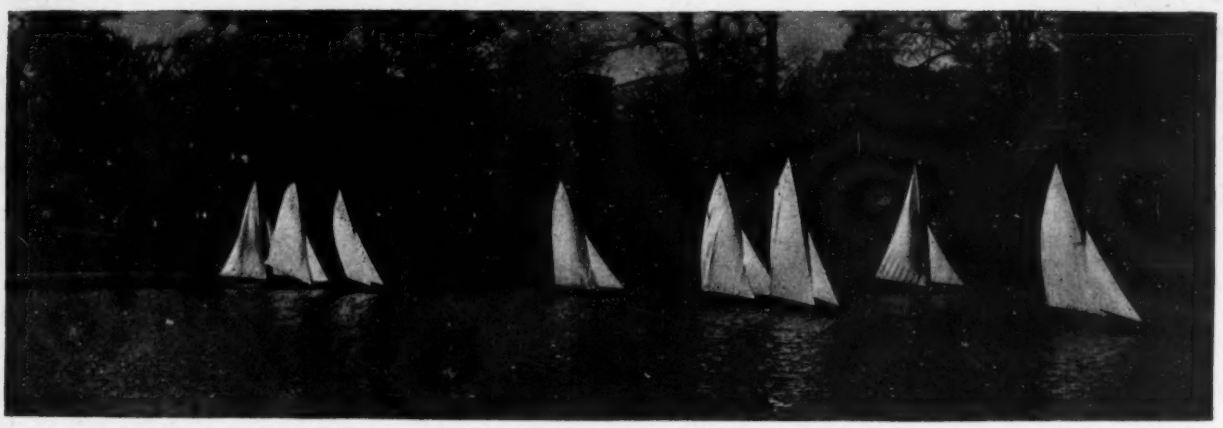
The runners are to be of the best oak you can buy, beg or steal. Straight-grained, quarter-sawed white oak is the proper material. They have to be strong and the best material is none too good. The forward runners are 4 feet long, 2¼ inches thick and 5½ inches deep at the forward end, tapering to 3 inches at the after end, as shown. The shoes are of soft cast iron, 2½ inches deep, 2¼ inches wide on top and shaped as shown. The cutting edge is about ½ inch deep, and each side makes an angle of 45 degrees with the ice. They are sharpened with a flat file as needed. The shoes are secured to the runners by four ½-inch machine bolts, with hexagon or square heads, except the one under the runner plank, which has a round head and a slot. This bolt has to be let into the runner, so bore the hole for the head before boring for the bolt. The bolts screw into the iron shoes, which must be drilled and tapped for them. Better get this done unless you are a machinist.

On each side of each of the forward runners is a chock. These are of 1¼-inch oak, 4 inches deep, rounded off as shown and fastened to the runner plank by a couple of ⅜-inch carriage bolts. The inboard ones are braced by a couple of wedge-shaped pieces of ⅞-inch oak fastened with stout screws. These braces may also be glued, and are sometimes let into the runner plank ¼ inch. Through the chocks and runner goes the riding bolt, a ⅝-inch carriage bolt. On each side of the runner is a plate of ¼-inch iron, let in flush, to take the wear and prevent the hole in the wood from enlarging. These plates are 4½ inches by 2½ inches and are fastened by No. 10 wood screws, one in each corner.

The rudder runner is of much the same style, but is only 2 feet 9 inches long over all, 4 inches deep and 1¾ inches thick. The shoe is 2 inches deep and is fastened by three bolts with square or hexagon heads. The riding bolt is ⅝-inch diameter. The rudder stock is a forging of 1¼-inch iron. The fork at the bottom is 2 inches wide in the clear, 4 inches long, 3 inches deep and ⅜ inch thick. The top of the stock, 12½ inches above the fork, is squared to 1 inch across the flats for the tiller and above the square is turned to 1 inch diameter and threaded. Above the nut the stock may be drilled for a split pin. Between the fork and the bottom of the hull is a washer made from a 1½-inch nut. This bears against the iron plate on the hull. There is a round washer under the tiller. The tiller is a forging and may be any convenient size and shape. It is shown 3 feet long and ⅞ inch diam-

(*Continued on page* 308)

Things we have all met—The carline



Start of one of the heats in the Central Park Model Yacht Club race for the Seebach Cup. The boats were started at five-second intervals

England and America to Meet in Model Yacht Race Next June

An international race for model yachts between England and America is now an assured thing, as all conditions have been agreed upon by W. J. Daniels of London, England, the challenger, and the Model Yacht Racing Association of America. Mr. Daniels agrees to race in the 46-inch rating class of the recently adopted American Model Yacht Rating Rule, known as Class B, and the races will be held during the first half of June, the dates to be announced at least two weeks before the first race.

Class B includes boats from 38 to 46-inch rating, but as the race will be sailed without time allowance it is probable that the competing boats will rate near the top limit of the class. The general conditions governing the match are as follows:

We agree to meet the challenger with only one boat, said boat to be named at least five (5) days prior to the first race.

Match to consist of the best two out of three races, one race to be held each day, on succeeding days.

Course. The course to be on open salt water free from obstructions of any kind, and, as far as possible, free from tidal conditions. First race to be windward and return; second race, triangular; third race, windward and return, each race to be three miles in length, each leg to be 1½ miles in the windward and return and 1 mile in the triangular races. There will be no time counted for stops or touches. Boats to be handled from rowboats only.

Rules. Race to be sailed under the racing rules of the Model Yacht Racing Association of America.

Each boat to be designed, built and sailed by a citizen of the countries competing, the actual sailing to be done by a Corinthian.

The prize will be a sterling silver cup offered by YACHTING.

In order to pick a defender to meet the challenger a series of elimination races will be held and all model yacht clubs, or model yacht sailors belonging to recognized yacht clubs, are invited to enter a boat for this series. The dates of the elimination races will be announced later. Copies of the rating rule and methods of measurement may be had from the Model Yacht Racing Association by addressing YACHTING, 47 West 47th Street, New York. Any club entering boats in the elimination series should announce the fact by February 1st, though the boat need not be named at that time.

The Seebach Cup Race

On account of the adoption of is to be raced for on Election Day of each year, irrespective of weather conditions, and is open to any Third Class Sailing Model enrolled in the Central Park Model Yacht Club. The winner of each race is recorded upon the cup and the owner whose name appears upon the trophy three times becomes the permanent owner of the cup.

The first race for this handsome prize was sailed on Election Day, November 8th, on Conservatory Lake, Central Park, New York City. Five heats were sailed and the *Impulse,* owned by Joseph A. Weaver, won.

The final points follow:

Yacht and Owner	Points
Impulse, J. A. Weaver.....	10
Sequoyah, J. McKenna....	9
Frances, W. Bloomfield....	8
Galatea, H. Griffiths.....	7
Lucky Lady, C. W. Bedell..	6
Blue Bird, H. Jaekel.....	5
Red Wing, L. B. Battey....	4
Ootukukunit, J. O. Berg....	3

Lines of Zaza, a Famous Old Timer

On account of the adoption of the new rating rule by a number of model yacht clubs doing away with the old sail-area-waterline rule, which produced flat, fin keel

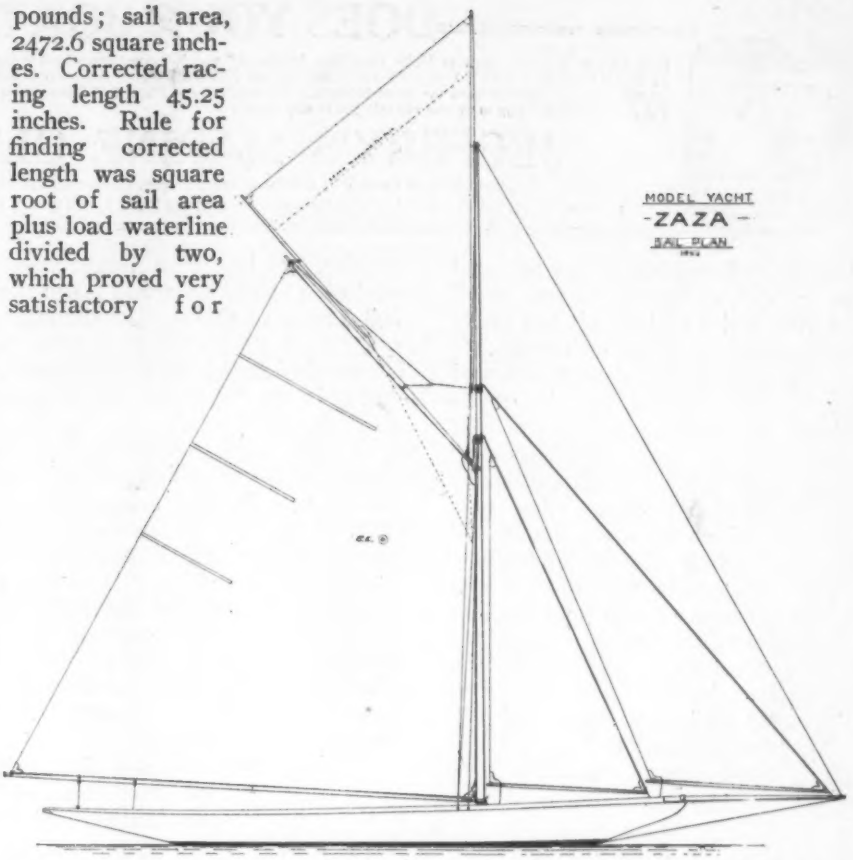
Some of the contestants for the Seebach Trophy. The winning boat *Impulse* is second from left

boats, the lines and sail plan of the model yacht *Zaza*, together with some facts connected with her history, should prove of interest, especially as she was built before the modern Universal Rule was adopted, and yet had many characteristics of boats built to that rule.

The *Zaza* was built to prove that a model yacht designed along standard, conservative lines could successfully compete with the so-called freaks of her day. She was a properly proportioned keel boat with limited draught and her record later proved her superior to the best of the deep fin boats whose maximum draught exceeded hers by at least four inches. The members of the old American Model Yacht Club of Brooklyn had argued, almost to a man, that such a boat could not succeed, but it took a man like the late Commodore James H. Lane to take a stand with the designer for conservative construction and put the rival types to a practical test. At his request, plans were prepared by Frank Nichols and the boat was built by Commodore Lane himself.

The *Zaza* was built to the third class, as it was desired to try her out against the fast boats in that class, which included the *Star*, owned by Townley and Piggott. This yacht had a record of more than twelve years of almost unbroken firsts in and out of the club, making her a worthy opponent. In the regular races of the club in 1901, the *Zaza* defeated the *Star* in three races out of five, and also in a number of scrub matches. Previous to this she had met and defeated many others.

The dimensions of *Zaza* are: overall, 62.75 inches; low waterline, 40.8 inches; beam, 16 inches; draft, 10.25 inches; displacement, 35.05 pounds; lead on keel, 24 pounds; sail area, 2472.6 square inches. Corrected racing length 45.25 inches. Rule for finding corrected length was square root of sail area plus load waterline divided by two, which proved very satisfactory for many years. All the races were sailed on New York Bay off 32nd Street, South Brooklyn.

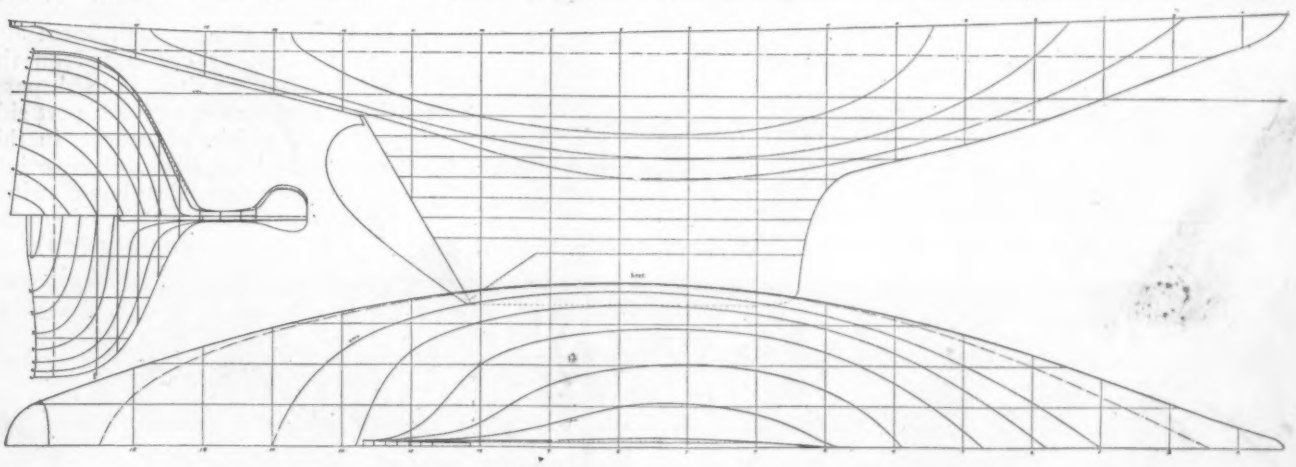


How to Build a Model Yacht by the Lift Method

PART V

In making up the spars, silver spruce is probably the best that can be obtained for this purpose. It is good practice to get out these spars as square sticks, of the proper size, which will mean that they should measure on each square face the same as the finished diameter. After cutting to length, the taper may be laid out on one surface, and after two sides are cut to this line the opposite two sides should be cut likewise. From here these sticks should be made octagon, or eight-sided. Then if the corners of the octagon are taken off the sticks will be very nearly round. After sanding, they are ready for two coats of shellac, with sanding between each coat, and then two or three coats of spar varnish.

Necessary cleats and screw eyes, traveler and other fittings should be made up or purchased, and some fine-braided linen line for the rigging. In making up the sails, a hem not over 3/16 inch to ¼ inch wide should be used, and be sure to place the luff of the mainsail parallel with the selvage of the cloth. Rings should be supplied for the mainsail,



Lines of model yacht *Zaza*, built in 1900. They make an interesting comparison with model yacht practice of to-day

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Send for our Booklets, "How to Make Your Boat Leakproof," and "Marine Glue—What to Use and how to Use It." Each grade is for a different purpose. IT IS IMPORTANT THAT YOU USE THE GRADE WE RECOMMEND. Any old boat so long as the frames are in fair condition can be made watertight by following the instructions in the above booklets. This applies to anything that floats from a canoe to a yacht, wood or steel. Put your leak troubles up to us—we will help you to stop them.

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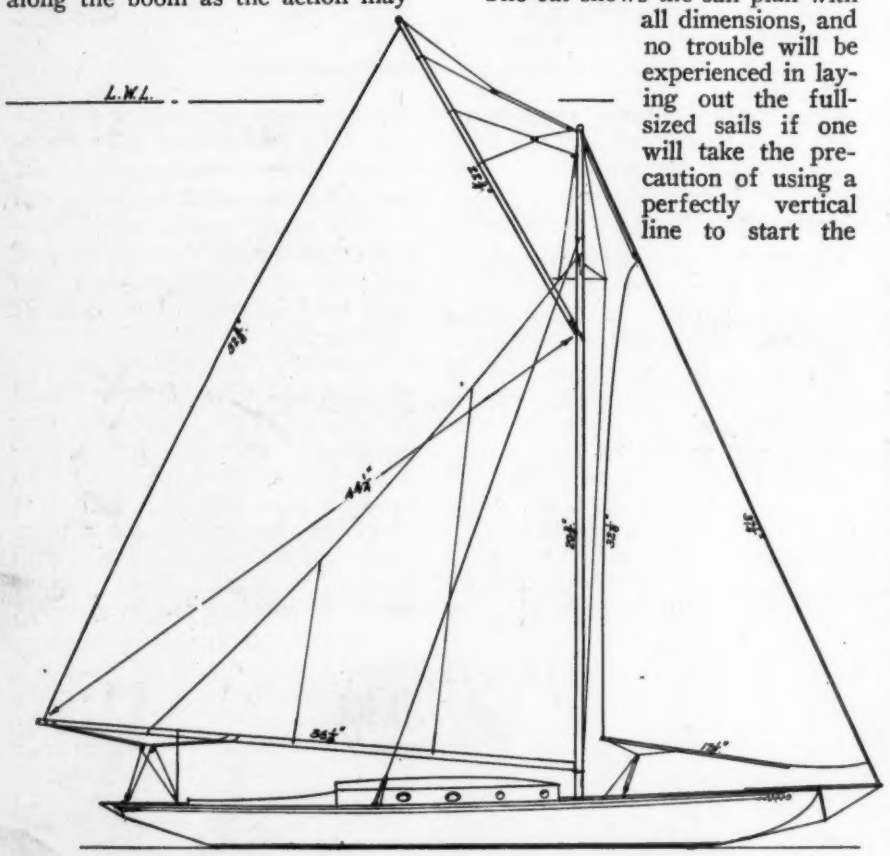
but the gaff and boom may be laced to the sail, either "over and over" or by a series of half hitches every three-quarters of an inch apart.

If a neat job is desired, a series of very small eyelets can be made about 1½ inches apart at the foot and head of mainsail, then some very small drive eyes can be made up out of ribbon pins. These eyes can be driven into the boom and gaff a little aft of each eyelet hole in the sail. A line made fast to the boom goose-neck, and then running alternately through the eyelet in sail and eye in boom, will produce a method of lashing very similar to that used on larger boats, and will allow the mainsail to be stretched along the boom as the action may require. It has been found more advisable to use a staysail boom the full length of the foot of the staysail rather than only part way as is sometimes used on the large boats, and this spar may be lashed over and over to the sail. At the bowsprit end there should be a metal band or ferrule into which is placed an eye, and from this eye connecting to the bowsprit eye should be a metal link. Another way of accomplishing this is to put a spar eye through the staysail boom at its forward end, connecting to bowsprit eye with link as before. The after end of this spar may also have a spar eye through which the staysail sheet will lead.

The cut shows the sail plan with all dimensions, and no trouble will be experienced in laying out the full-sized sails if one will take the precaution of using a perfectly vertical line to start the mainsail on. It is also advisable to use a base line representing the position of shape and sheer of the model from which to work this perpendicular, which represents the mast. Allowance will naturally have to be made for thickness of spars as the patterns for the sails are laid out, and it is well to cut the sails a little short of their respective spar lengths, or to take the precaution of cutting the spars a little bit long, so as these sails stretch there may be room to haul them taut.



Sail plan and rigging details of 30-inch waterline model yacht designed to Universal Rule

Number O linen coil is the trade name for about the best rigging line that can be obtained for the purpose, and while wire standing rigging is used a great deal, I think for a boat of this size that pliable standing rigging will be more satisfactory.

The control of the boat by means of the boom and mainsheet is, of course, very important, and almost any one of a dozen different arrangements have been found very satisfactory. I believe every member of my club has a different method of handling his boat before the wind. The main features, however, are the same, and the result to obtain is to keep the model off the wind by means of the rudder when running before the wind. It therefore follows that when the boom is on the port side, the tiller action must be such as to prevent the boat from coming up into the wind, which action is usually obtained by having the sheet made fast to the tiller, the sheet then passing to the fair lead or eye on the starboard side of deck, and from there through boom and eye to cleat or crib-board on the deck. Another sheet is used, passing through an eye on the port side of deck, which, of course, in this case would be slack, coming into play at any time when boom swings to starboard side. This, of course,

(*Continued on page* 309)

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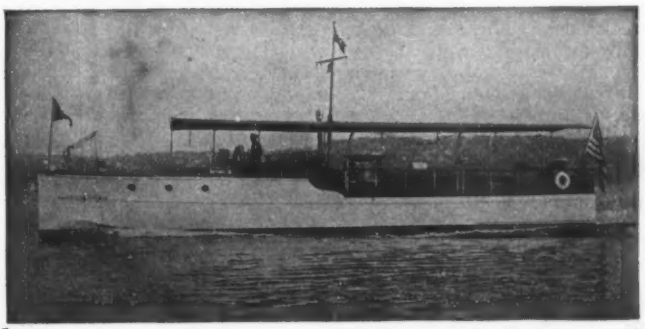

Mimi B—one of our 53-footers

We build yachts complete and there is no divided responsibility. Our 20th Century Motor, which we build in our own shop, is one of the leading engines. We are in position to build you a complete yacht, furnished and equipped, at prices that cannot be equalled when construction and finish are considered. Let US figure on your new yacht for next season.

6-Cylinder, 6½" x 8½" 65 H.P.
Twentieth Century Engine

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Surely you want your boat equipped with

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SWIVEL ANCHOR

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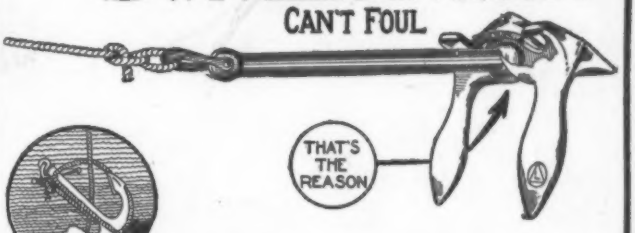

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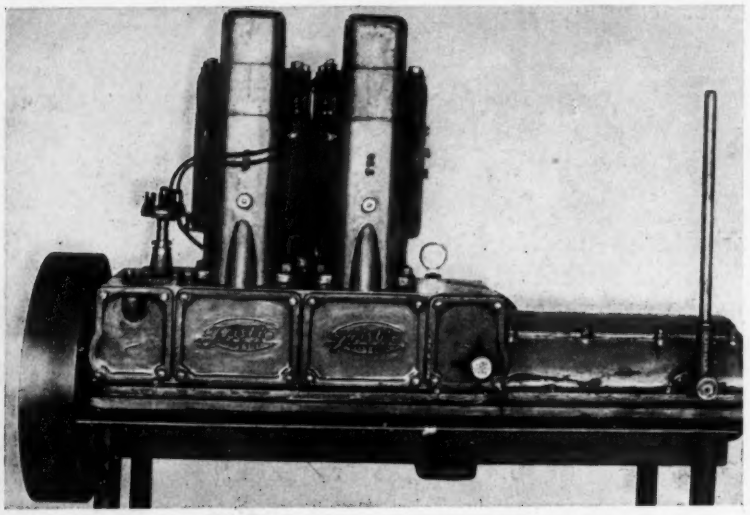
Of Interest to the Skipper



Model T 20-H. P. Frisbie motor with all moving parts inclosed

New Model "T" 20 Horse-power Frisbie Motor

To meet the requirements of slightly different classes of work and types of boats, the Frisbie Motor Co. have brought out what is known as the new model "T" line of motors, the first size in this line being the 2-cylinder, 20 H. P. size. This new motor has so many distinctive points over anything of its type that it will fill a long-felt want.

The bore is 6 inches, by 6-inch stroke, and each cylinder has four valves instead of two. The cylinders themselves are cast separately and have detachable heads. The valves are located in detachable heads rather than in removable cages. Heretofore valves located in detachable heads and not in removable cages have not been accessible for the reason that before the head can be removed either the exhaust line or intake line, or else the overhead camshaft, had to be disconnected. In any valve-in-head motor the valves must be truly accessible if the motor is to be successful. Valves and seats must be kept in good condition or else power is sacrificed. To get accessibility of the valves on this motor the gas ports are carried from the valve apertures through the cylinder head itself and down on the side of the cylinder to a point lower than that at which it was desired to break off for the removable head. This gives a head that can be removed without disconnecting any water piping, exhaust or intake pipes.

The carrying of the intake and exhaust gas ports down on the cylinder sides also allows a perfect combination intake and exhaust hot spot manifold. Undoubtedly it is this manifold that gives the perfect carbureting system and fuel economy described later.

The crankcase is of split type construction, all bearings being hung in the upper half. The lower half of the crankcase extends aft under the reverse gear and forms an oil pan extending the whole length of the motor. In the upper base there is a web provided at points in the base corresponding to the forward and after side of each individual cylinder, which gives rigid base construction and also supports the center crankshaft bearing. There is thus a main crankshaft bearing provided between each throw of the crankshaft.

The camshaft bearings are placed in plates which can readily be removed after taking off the hand hole plates of the upper half of the crank case and the camshaft can be removed bodily from the base without disturbing anything else.

Practically everything on this motor is enclosed. Covers entirely enclose the rocker arm mechanism and even covers run down the side of the cylinder and enclose the push rod mechanism. These covers are held in place by means of one stud to each cover, and one knurled nut. They may be removed readily without using a wrench or pliers.

The Frisbie Company have been particular in this motor to secure one that will operate without giving out a lot of smoke and that will not throw oil. In the model "T" line of motors they claim that they have the cleanest motor in operation that has ever been built.

This motor has a compression, cold, of approximately 60 pounds. This is low and has been kept low so that the motor will operate on the present grade of fuel without knocking. With 6-inch bore and 6-inch stroke the engine has actually shown on repeated tests 23½ H. P. at 600 R. P. M. Following the Frisbie policy of rating motors conservatively it is marketed as a 20 H. P., yet in figuring fuel and oil consumption one should realize the motor is actually giving 23½ H. P.

On shop tests on the Sprague Electric Dynamometer, which insures accuracy, and by use of special graduated fuel tanks, the motor ran on a gas consumption of little less than .58 pounds per H. P. hour. The gasoline used was the standard market quality distributed by the Standard Oil Company. One of the motors running in a boat at Providence, turning at 595 R. P. M., ran, on one gallon of gasoline, 27 minutes. That would show fuel consumption per hour 2.2 gallons and corresponds to the economy obtained in shop tests. In that same boat at 495 R. P. M. one gallon of gasoline operated the motor for 32½ minutes. As regards oil consumption, the figures are also exceptionally low. Installed in a boat doing hard work, fishing and towing, etc., the motor used about one and a half quarts of oil in 30 hours of operation. That would show oil consumption of one quart to twenty hours.

A Hall-Scott in a Hand V-Bottom

The following letter from a satisfied Hall-Scott owner makes interesting reading:

Edgewood, Md.

The Hall Scott Motor Car Co.,
Buffalo, N. Y.

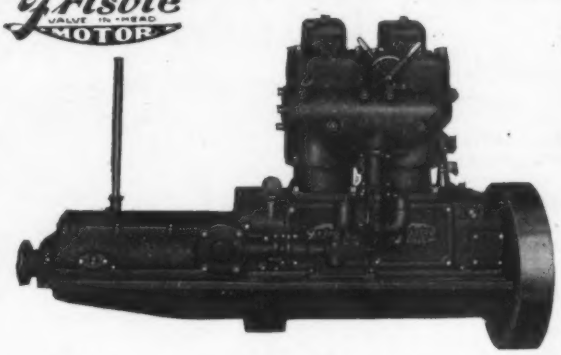
Several times you have asked me for photos of my boat *C. P. & D.*, in which I installed one of your four-cylinder 125-H. P. motors.

It may be of interest to know that the writer built *C. P. & D.* by himself, without any help excepting that of a gardener, on his country place, during the winter and spring of 1915 and 1916. She then contained a model 30 Loew-Victor motor and turned up a very creditable speed for a 20 H. P. machine. The boat was built from plans furnished by W. H. Hand, and is a regular Hand V-bottom design, heavily built and with a decided rocker to her chines.

In five years *C. P. & D.* has ably demonstrated her seaworthy qualities on Chesapeake Bay, but I was always cautious until this summer. Your motor was

C P & D, a Hand V-bottom that gave a remarkable performance with a Hall-Scott 125-H. P. motor

Frisbie VALVE IN HEAD MOTOR



NEW MODEL "T" 20 H. P. FRISBIE

Two cylinders, four cycle, 6" bore and 6" stroke. *Four valves* in each cylinder head, instead of two; set in *detachable heads*, instead of in removable cages. This gives greater accessibility and permits the use of a *hot spot manifold*. These, and many other new features, make it a motor of exceptional strength, reliability and efficiency.

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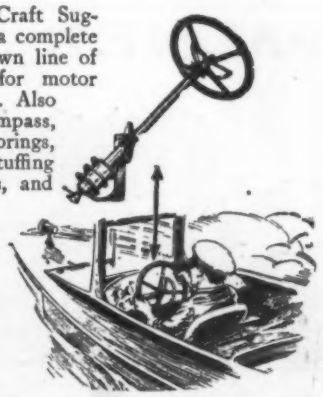
One of the 1,001 WC Products

The Model B shown here is one of our high grade Auto Steerers equipped with heavy inside steering post for hard service in runabouts, auto boats, and cruisers. Has spark and throttle controls, brass drum, four-spoke spider, and laminated maple rim stained imitation mahogany. May also be had, if specified, with new hollow brass grooved drum, in which tiller rope runs to prevent over riding.

We make a full line of Auto Bridge Deck Steerers for every purpose and every purse.

Get This Book. "Sea Craft Suggestions and Supplies" is a complete directory to the well known line of WC Marine Hardware for motor boats and other small craft. Also tells how to Box the Compass, contains hints as to Moorings, Proper Ground Tackle, Stuffing Boxes and Stern Bearings, and much other information of practical value to the small boat owner. Yours, prepaid, 50c.



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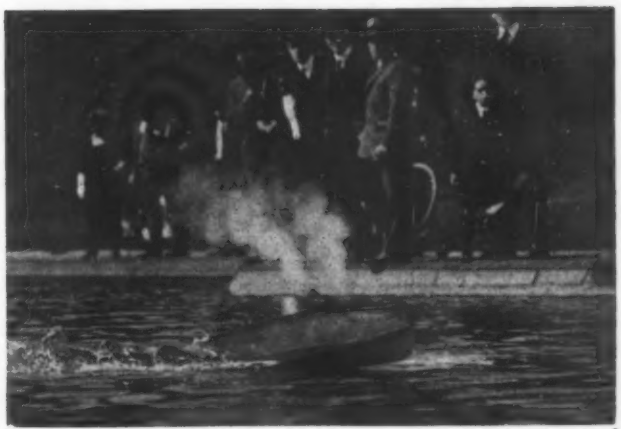

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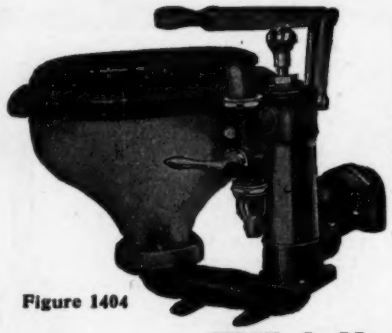

Figure 1404

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The best little closet on the market today, possessing many of the advantages of the large size toilet. All brass and porcelain. Oak seat and cover.

Curtiss Porcelain and Folding Lavatories

Corner Porcelain Lavatory

Dimensions, 12" x 12", 12"x14" and 12"x15".

Folding Lavatories in all styles and sizes.

Fig. 1392-A

All prices subject to market advances, which are continually changing

Manufactured Solely by

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installed and was ready to run the latter part of July. After a number of try-outs on the Bush River, giving the motor a chance to work in, I made a run of 75 miles one afternoon in the bay. It was rough, but the indicator stood at 1220 R. P. M. for 3 hours and 40 minutes. The last 37½ miles I was towing a 20-foot Havre de Grace bateau.

Several more runs of from 25 to 75 miles were made, and then, growing bold, I started with my wife and four friends for Cape May, N. J., the total distance covered on this trip, as well as we could scale our course from the Government chart, being 305 nautical miles. Our total running time, excluding 26 miles in the Delaware & Chesapeake Canal, was 13 hours and 54 minutes; gasoline consumption, 93 gallons; lubricating oil, 6½ gallons. From Delaware City to Cape May Point we ran slowly, 960 R. P. M. about 17 M. P. H., as we were bucking a stiff head wind and flood tide and did not wish to wet everything and everybody. When we left the Capes and met the ocean proper we increased our R. P. M. to 1200 and ran into the inlet above Cape May, six hours from Delaware City.

The next morning our friends decided they wanted to ride a surf board behind the *C. P. & D.* on the ocean. They didn't—but that's another story. Anyhow, as there was a northeaster blowing the tops off the waves, another man and I decided we wanted to see how a 25-foot Hand boat with 125-H. P. Hall-Scott inside would behave. Nothing was on the outside. A Government boat lying in the inlet wanted to know where we were going and when we told them they told us it was impossible for us to get out of the inlet. So we handed the Hall-Scott the gun and at 1400 out we skipped on to Mr. Atlantic in a northeasterly blow and bathing suits. The suits were a mistake; should have been oilskins. Down at Cape May we stopped, launched our board but no one came out to ride, so we hauled it in and started to do stunts.

We put the *C. P. & D.* through everything we could think of, from 250 R. P. M. to 1700 R. P. M. Under 400 she took water on her deck; from 400 to 700 she was wet; 850 and careful handling, perfectly dry; but at 1700, approximately 33 miles per hour, head on or running away it was fine, but the quarter—well it's fine, but wear oilskins. A fire hose at 10 feet hasn't a thing on it, but we ran her one hour wide open, throttled her, stopped her, started and shot her wide open. Just gave her H—ll and then decided we had *some boat* and *some motor*.

The following afternoon, in the same northeaster, we returned to Delaware City in four and one-half hours, and the next day, after eating dinner at Betterton, came home at 30 miles per hour.

From September 9th to 20th I used this boat shooting and running anywhere and everywhere and have also made a number of long runs of 75 to 150 miles. All told, over 800 gallons of gasoline have been consumed and with the exception of a few dirty spark plugs and some small starter trouble the motor hasn't had a wrench put on it. I have an open offer here to take anyone on for a race to Norfolk, Va., and return to Baltimore. The date and hour to be set 30 days in advance, the first boat back the winner; for open boats—runabouts. No one so far has taken me up. When I wrote you last winter I told you I wanted a motor that would go when I wanted to and keep it up until I quit. You said yours would. So far it's more than made good. Also Mr. Hand knows how to design a boat, especially when he designs for a 20 H. P. engine and is put up against a 125 H. P.

World-Wide Lubrication Service is Subject of New Booklet

The story of American enterprise and achievement is written in "The Sign the World Knows," a handsome little booklet just edited by the Vacuum Oil Company of New York, and descriptive of a unique "Service of correct lubrication on the seven seas."

In 250 ports, not only in the United States, but in every important shipping center of the globe, the Vacuum Oil people have established a remarkable service, supplying ships and yachts with the well-known Gargoyle lubricants in all grades and varieties.

Large tank steamers bearing the familiar red Gargoyle insignia on their stacks ply between eighteen refining centers and foreign ports, insuring at all times an adequate supply of any special type of lubricant which may be wanted, whether the call be made in Rio or Calcutta, in Liverpool or Singapore.

Special Vacuum Oil Company representatives are at hand at all of the stations, always ready to assist in extending their "service of correct lubrication."

A convenient form of contract is made with owners of yachts and cruisers, who can thus make all necessary arrangements, here in this country, for supply service in any ports desired. All that is then required is the presentation of a form-requisition signed by the skipper.

The booklet further lists the kinds and types of lubricants made available through this service. Along with another valuable little pamphlet, entitled "Correct Lubrication for Your Motor Boat," it is procurable by writing to the proper department of the firm—or, better, by simply addressing a postal to YACHTING, 47 West Forty-seventh Street, New York.

Hall-Scott Marine Engines

The BETTER Marine Engine for runabouts and fast cruisers. Greater Speed—More Economical—Less Vibration—More Engine Room Space. "Always Reliable."

TWO SIZES ONLY { 4 Cyl. 125 H. P. Weight 1100 Lbs. / 6 Cyl. 200 H. P. Weight 1300 Lbs.

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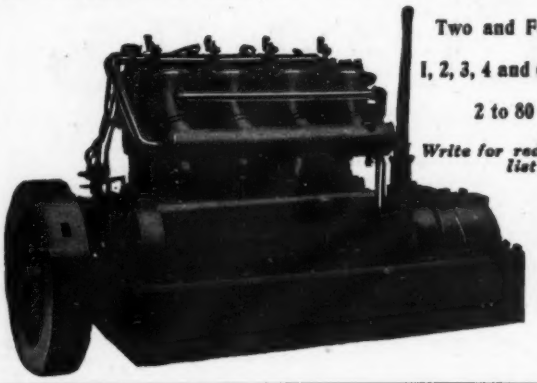

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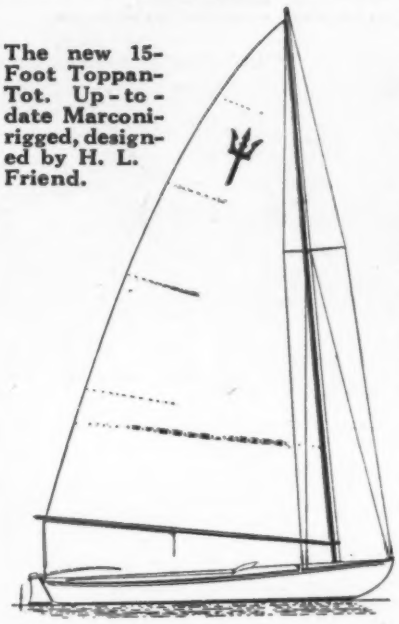

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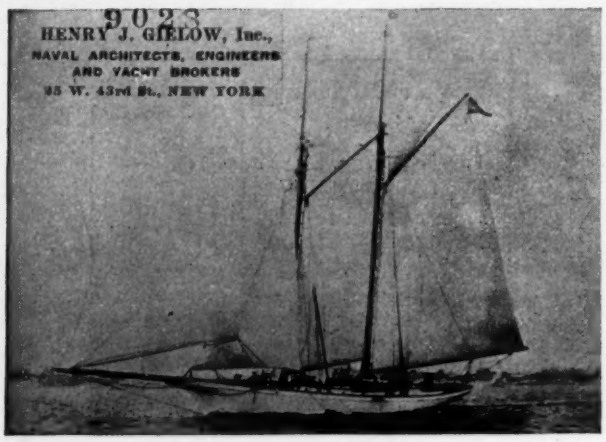
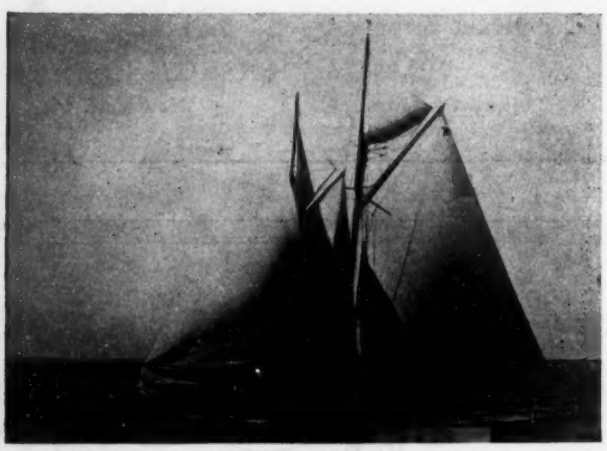
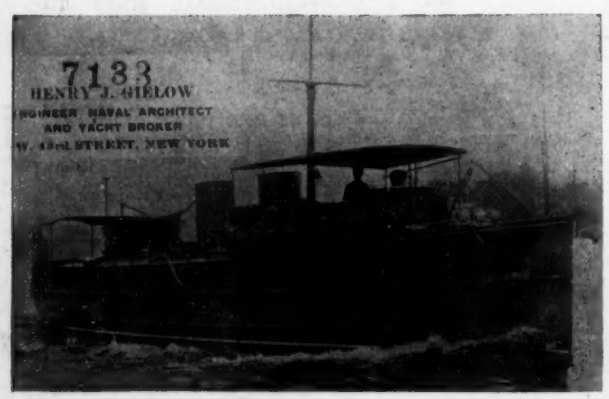


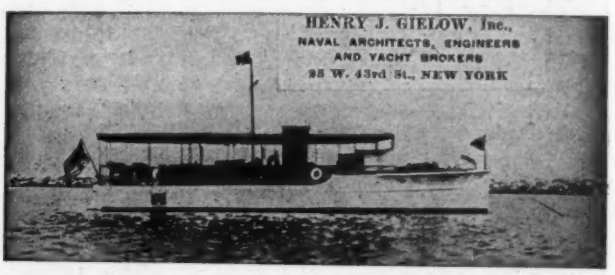
NO. 9028—FOR CHARTER—70 ft. aux. Keel flush deck schooner 17' beam, 7' draft. Two new motors just installed. 3 staterooms, saloon, sleep 6-8. First class condition, fully equipped. Reasonable price for season. Delivery June 1st. Henry J. Gielow, Inc. 25 West 43rd Street, New York City.



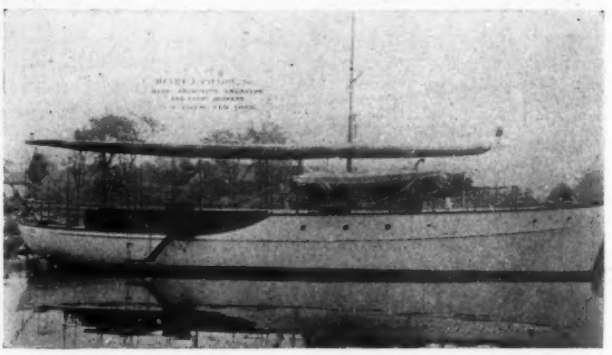
NO. 8608—Bargain—Sale-Charter—Splendid steel auxiliary schooner for West Indies cruise. 118 x 79 x 22 x 12' 6", 100 H. P. Standard motor, speed 7 knots, 4 large airy rooms, main saloon, 2 baths. Hot water heat, teak launch, sailing life boat and dinghy. Fully found, all in fine condition. All teak deck trim. Able offshore cruiser. H. J. Gielow, Inc., 25 W. 43d Street, New York City.



NO. 7133—68 foot raised deck cruiser, overhauled and reconditioned spring 1921. Sterling engine, speed 12 to 14 miles. Interior finish white enamel, two double staterooms, large galley, shower. Exceptionally heavily constructed boat, fine sea boat. Owner anxious to sell, having purchased larger yacht. Will consider real estate trade. Inspection and trial trip in New York. Henry J. Gielow, Inc., 25 W. 43rd Street, N. Y. C.

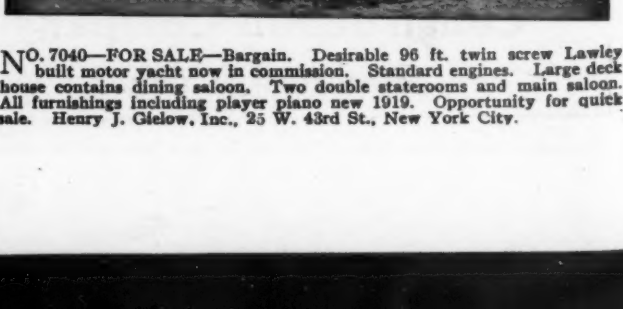


NO. 7644—FOR SALE—Reasonable price. High grade 52 ft. Bridge deck cruiser. Speedway motor speed up to 15 miles. Double stateroom, saloon with upper and lower berths, toilet room and galley. Henry J. Gielow, Inc. 25 W. 43rd Street, New York City.



NO. 7194—FOR SALE—Cruising power yacht, 60' x 15'7" x 4'6". Speed 10 knots. Six-cylinder, 75-H.P. Murray & Tregurtha motor. One double and single stateroom, bathroom, galley, etc. Heated by hot water, owner anxious to sell. Henry J. Gielow, Inc., 25 W. 43d Street, New York City.

NO. 7230—FOR SALE— At attractive figure, well constructed 52 foot express cruiser, speed up to 21 miles. Thoroughly overhauled and reconditioned by builders. Now in first class shape. Owner very anxious to sell. Sleeps 6 to 8. Located at Atlantic City. Henry J. Gielow, Inc., 25 West 43rd St., New York City.



NO. 7040—FOR SALE—Bargain. Desirable 96 ft. twin screw Lawley built motor yacht now in commission. Standard engines. Large deck house contains dining saloon. Two double staterooms and main saloon. All furnishings including player piano new 1919. Opportunity for quick sale. Henry J. Gielow, Inc., 25 W. 43rd St., New York City.

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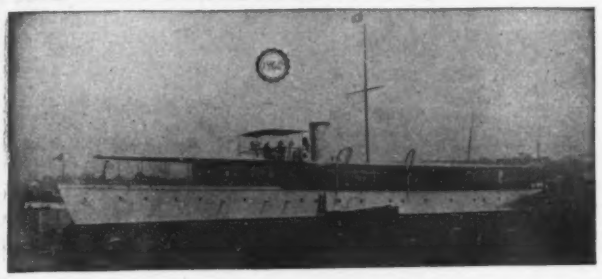
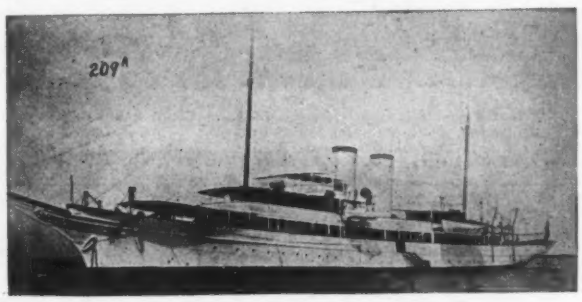
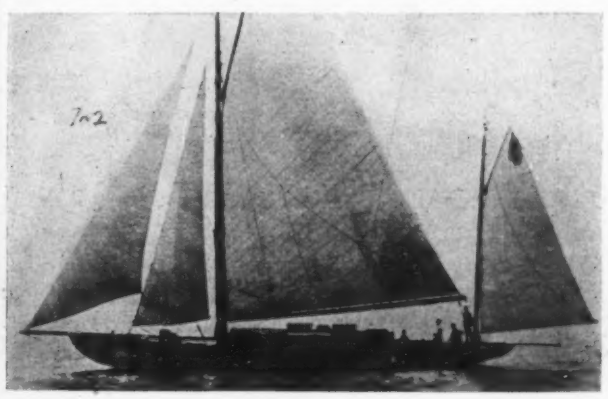


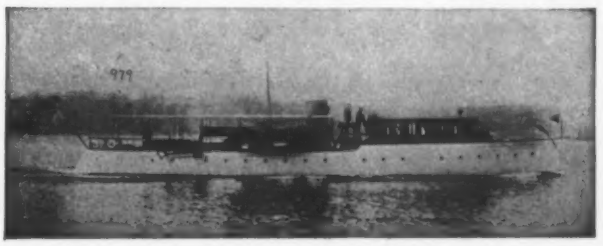
NO. 1466—FOR SALE OR CHARTER—Particularly desirable 140-foot twin-screw steel cruising power yacht. Speed up to 18 miles; two 300 H. P. Standard Motors. Dining saloon and social hall on deck; 3 double and 1 single staterooms, 3 baths and toilet rooms, etc. Recently overhauled thoroughly at large expense. In splendid condition. Further particulars from Cox & Stevens, 15 William Street, New York.



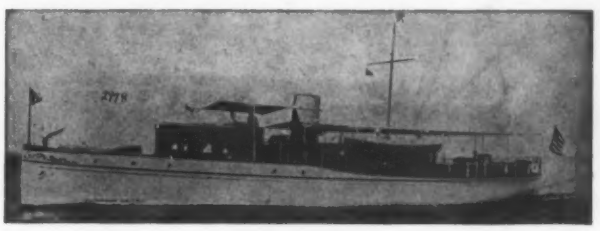
NO. 209—FOR SALE OR CHARTER—Large seagoing steam yacht. Exceptional speed. Roomy accommodation. Completely reconditioned recently. Unusual opportunity. Cox & Stevens, 15 William Street, New York.



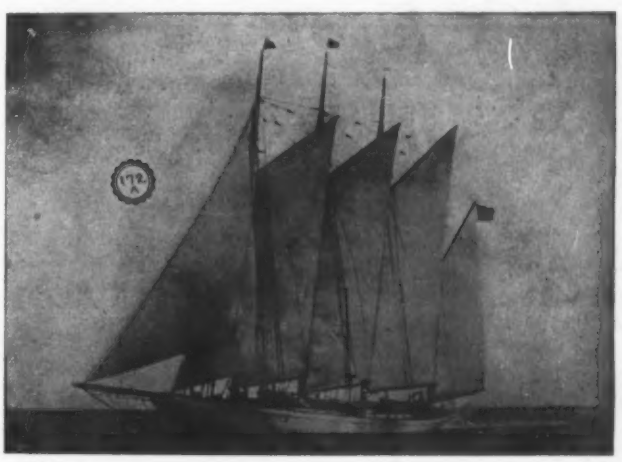
NO. 702—FOR SALE—Shoal draft auxiliary yawl; 64 x 46 x 15.6 x 4 ft. draft. Double and single staterooms, besides good size saloon with two transoms. Speed under power 7½ miles; 24 H. P. Motor. In excellent condition throughout. Unusual opportunity. Price low. Cox & Stevens, 15 William Street, New York.



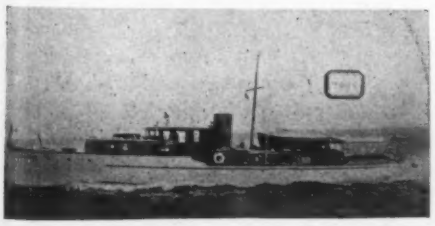
NO. 979—BARGAIN—(might charter) Especially desirable 98 ft. twin screw cruising power yacht. Speed up to 16 miles; Standard Motors. Deck dining saloon, three double and one single staterooms, two bathrooms, etc. Teakwood deck house and deck trim. Completely overhauled, new furnishings throughout. Cox & Stevens, 15 William Street, New York.



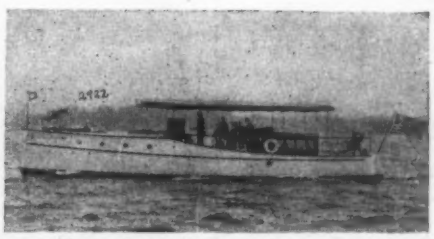
NO. 2978—FOR SALE—Desirable twin-screw cruising power yacht; 80 x 14 x 4 ft. Speed 13 miles; two 50-60 H. P. Twentieth Century motors new 1919. Dining saloon, two double staterooms, bathroom and two toilets, galley, etc. Recently thoroughly overhauled at large expense. Cox & Stevens, 15 William Street, New York.



NO. 172—FOR SALE OR CHARTER—Auxiliary schooner (3-masted with mizzenmast), 113 x 85 x 21.4 x 5.10 ft. draft. Speed 8-9 miles under power. Large saloon, two double and two single staterooms, two bathrooms and toilets. In splendid condition. Price and further particulars from Cox & Stevens, 15 William St., New York.



NO. 4048—FOR SALE—Practically new, handsome, fast, twin-screw cruiser; 64 x 12.6 x 3' 6" draft. Speed up to 19 miles; two 8 cyl. 175 H. P. Van Blerck Motors; electric starters. Enclosed bridge with full motor controls. Dining saloon, two double staterooms, toilet room, galley, etc. Probably roomiest boat of type and size available. Price attractive. Cox & Stevens, 15 William Street, New York.



NO. 2922—FOR SALE—Bridge deck cruiser, 47 ft. x 11 ft. x 3 ft. 6 ins. Speed 11 miles; Speedway motor. Built 1914. by Consolidated Shipbuilding Corp. Double stateroom and saloon. Excellent condition, having had best of care. Price attractive. Cox & Stevens, 15 William Street, New York.

NO. 3151—FOR SALE or CHARTER—Particularly desirable twin-screw houseboat; 77 x 17.6 x 3 ft. Speed 11 miles; two 6 cyl. 60-70 H. P. Standard motors new 1919. Large deckhouse containing social hall; main saloon, two double and two single staterooms, two bath and toilet rooms, etc. Handsomely finished and furnished. Cox & Stevens, 15 William Street, New York

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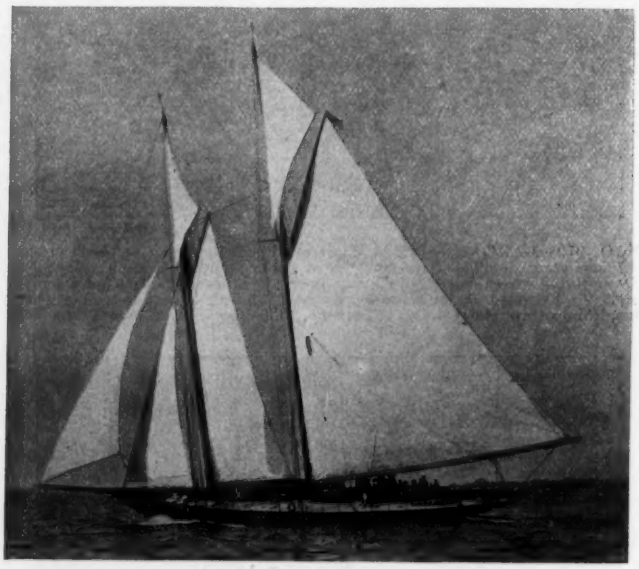
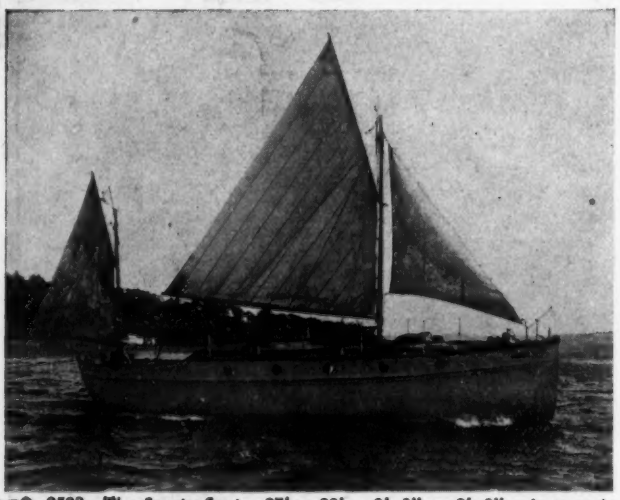
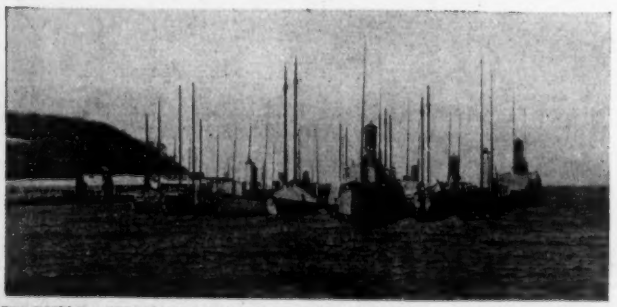


NO. 698—Able flush deck schooner yacht. 85' x 56' x 18' x 10' 6". Three staterooms, large saloon, 10' x 17'. Power launch. Sails and rigging in fine condition. This yacht won the race, N. Y. to Bermuda. For further details see G. W. Ford Yacht Agency, Agents, 41 East 42nd Street, New York City.



NO. 2528—The finest afloat. 37' x 33' x 9' 6" x 3' 6". Automatic Engine, New 1921. Stateroom. Shipmate stove and all comforts immaginable. See G. W. Ford Yacht Agency, 41 East 42nd Street, New York City.



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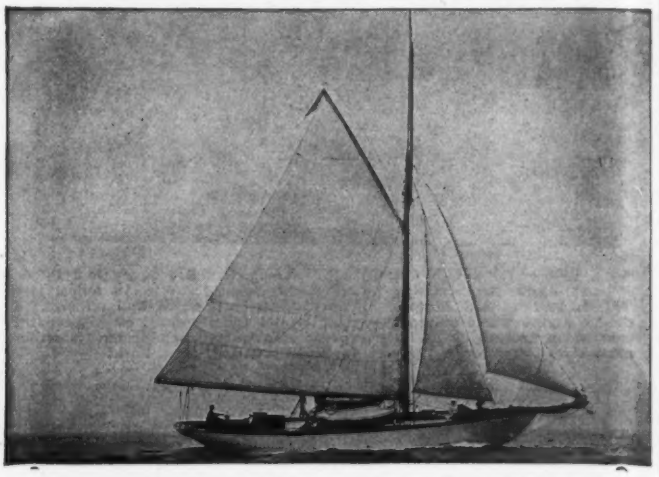
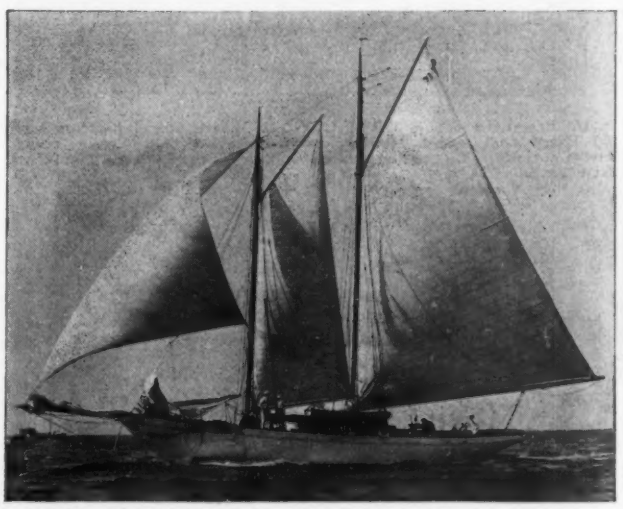
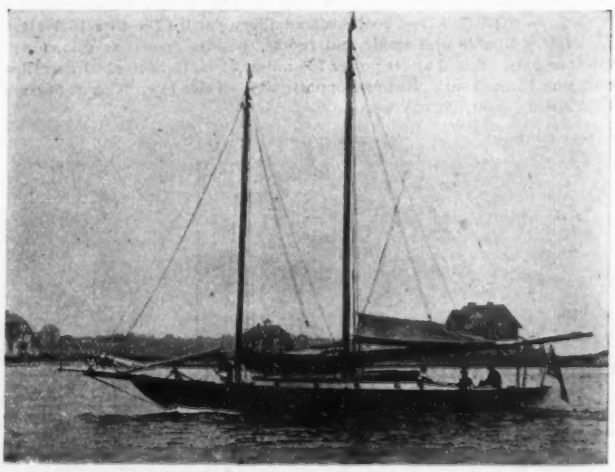


NO. 687—Choice Herreshoff Sloop. 58 ft. x 44 ft. x 13ft. 6 in. x 8 ft. Flush decks. New sails; launch and dinghy. Two staterooms. A real seaboat. For further details, see G. W. Ford Yacht Agency, 41 East 42nd Street, New York City.



NO. 1119—FOR SALE—Lawley Built Keel aux. schooner, Flush Decks. 63' x 45' x 15' 6" x 8' 6". Launched 1914. For further particulars see G. W. Ford Yacht Agency, 41 East 42nd Street, New York City.



NO. 1080—FOR SALE—Auxiliary. In pink of condition. 42' x 30' x 12' 2" x 4' 6". Launched 1915. See G. W. Ford Yacht Agency, 41 East 42nd Street, New York City.

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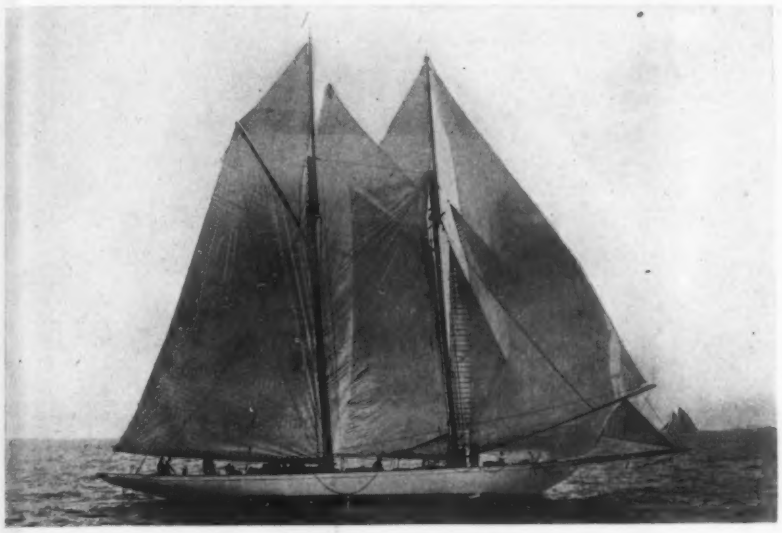
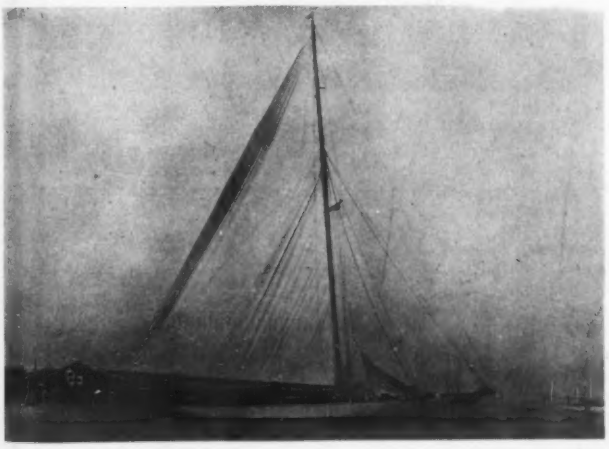
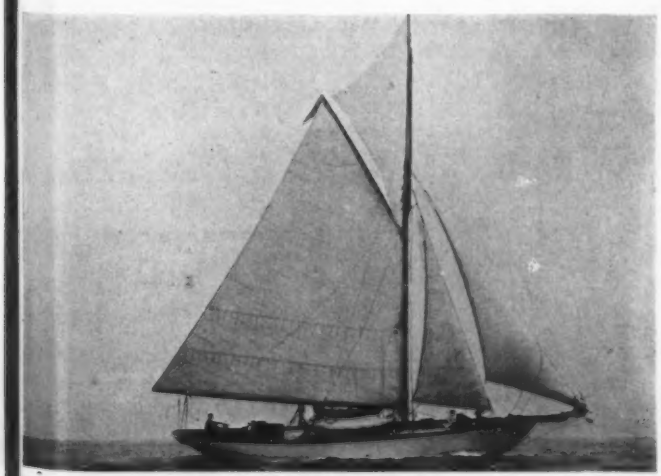


NO. 13656—FOR SALE—Wood auxiliary schooner, designed by Cary Smith. 95′-0, 68′-0, 20′-5, 10′-0. This yacht has proved herself very seaworthy as she has made several successful trips to the West Indies.

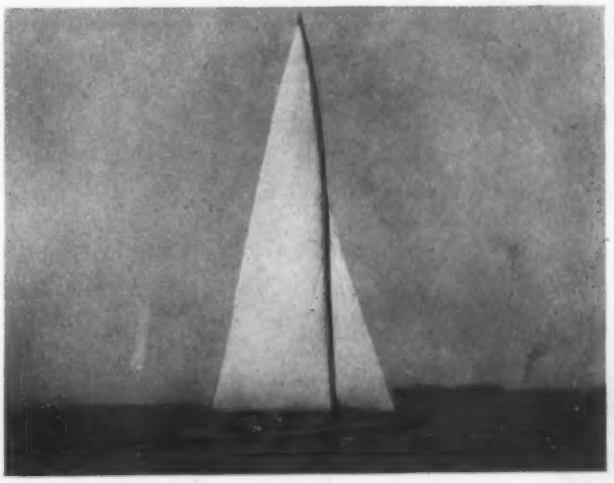


NO. 25420—FOR SALE—One of the famous Herreshoff "57's" 85′-0″, 62′-8″, 16′-7″, 10′-10″. An excellent boat for racing or cruising.

NO. 25851—FOR SALE—New York 40-Footer, 59′, 40′, 14′-5″, 8′-0. In fine condition. Full racing equipment.



NO. 25101—FOR SALE—58′-44′-13′-6″-8′-0. Very able and seaworthy Herreshoff sloop in best condition. Complete cruising outfit.



NO. 25399—FOR SALE—Exceptionally fast and powerful R boat. Would make a splendid boat for the class on short cruises.

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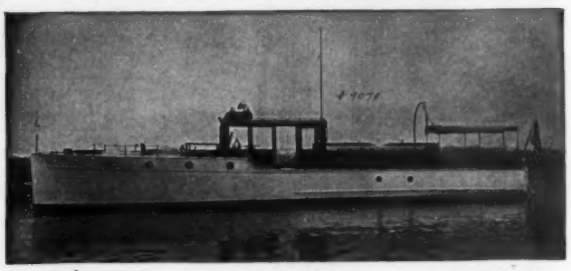

NO. 9078—FOR SALE—Fast 48′ express cruiser. Two new 6 cylinder Van Blerck motors. Good accommodations. Thoroughly overhauled last year in all departments.

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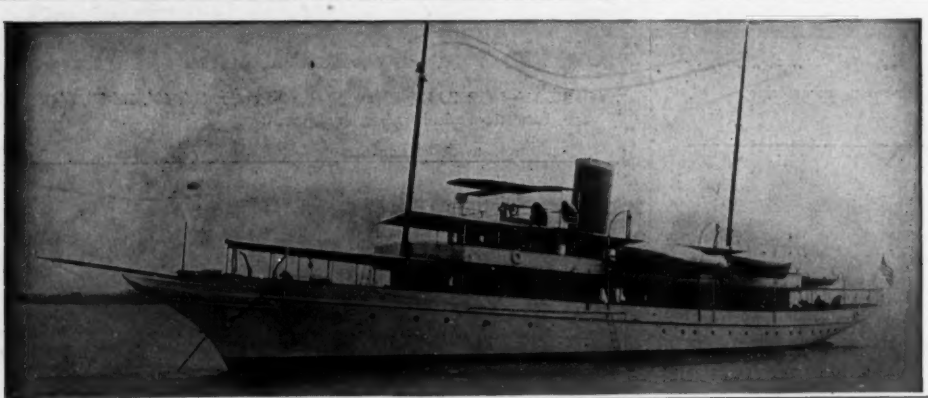

NO. 659—Exceptionally desirable steel steam yacht, suitable for extensive cruising, 187 x 24 x 10.6, of best construction, has had excellent care and in A-1 condition. Was not in Government Service. Built under our supervision. Inspection invited. For plans and full particulars apply William Gardner & Co., 1 Broadway, New York.

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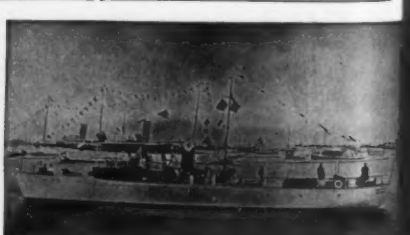
NO. 1424—Lawley built 52-ft. cruiser, 6 cylinder Buffalo motor, double stateroom, saloon, etc. Low figure. Apply Wm. Gardner & Co., 1 Broadway, N. Y.



NO. 1815—Twin Screw power yacht 105 x 15′ 6″, two 6 cylinder Standard motors 12 x 14, good speed and accommodation. A-1 shape. Apply William Gardner & Co., 1 Broadway, New York.

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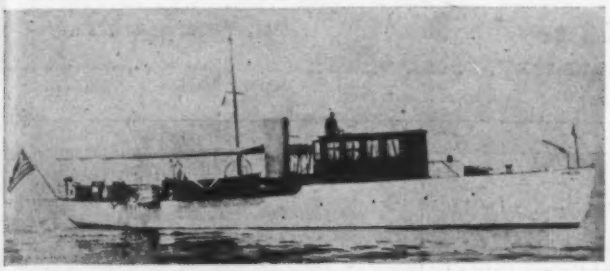
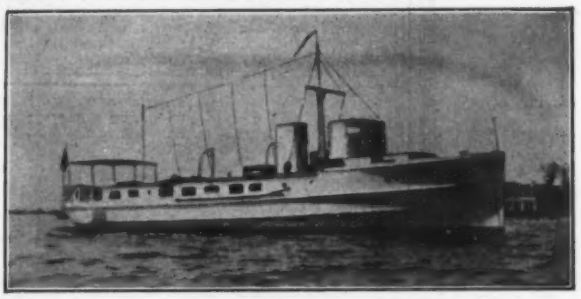
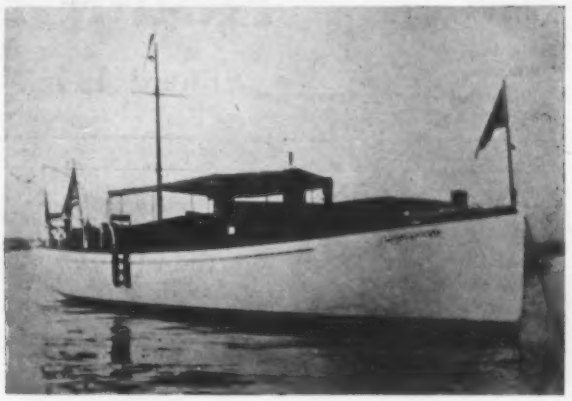


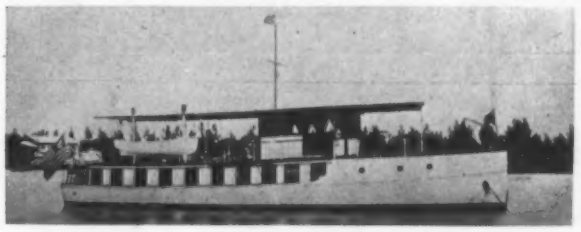
NO. 315—FOR SALE—80 foot cruising motor yacht. Has two double staterooms, saloon, deck dining room. 125 H. P. Standard Engine. Speed up to 14 miles. Newly furnished and in perfect condition. Offer considered. R. M. Haddock, 50 East 42nd St., New York City.



NO. 316—FOR SALE—59-ft. bridge deck cruiser, recent build. 70.90-H.P. Sterling engine, 1917. A very snappy-appearing yacht. Price asked is reasonable, and offer wanted. Full particulars, apply R. M. Haddock, 50 East 42d Street, New York City.



NO. 372—FOR SALE OR CHARTER—50 x 13 x 3'6" Cruiser. Standard engine. Accommodates six in owner's, three in crew quarters. Fine boat for cruise to Florida. Very able and economical to run. R. M. Haddock, 50 East 42d Street, New York City.



NO. 210—FOR SALE OR CHARTER—63 foot Houseboat, now in Florida waters. 16 ft. beam, 3 ft. 6 in. draft. Two 50 H. P. 20th Century engines. One double and two single staterooms, bath, toilet, etc. Boat in fine condition. R. M. Haddock, 50 East 42nd St., New York City.

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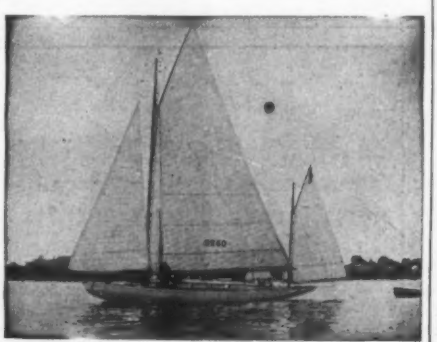
NO. 2034—52 foot Express Cruiser. Main cabin with four berths, double stateroom, two toilets, two berths and toilet for crew. 200 H. P. Sterling Motor. Speed 22-24 miles. Apply H. H. Jennings Company, 154 Nassau St., New York City.

NO. 1909—Twin Screw Power Yacht 90' x 16' 3" x 5' 2". Three staterooms. Dining saloon. Two toilets, bath, etc. Two Winton Motors, speed 14-17 miles. Exceptionally fine yacht. Apply H. H. Jennings Company, 154 Nassau St., New York City.

NO. 4225—SALE OR CHARTER—50 foot Power Houseboat. Two double and one single stateroom, two berths in main cabin. 32-37 H. P. Standard Motor. Speed 8 miles. Electric lights, etc. Apply H. H. Jennings Company, 154 Nassau St., New York.



NO. 3260—Auxiliary centerboard yawl. 55' x 36' x 12' 6" x 6'. Stateroom and main cabin sleep five persons. Toilet. Two berths in forecastle. 25-35 H.P. Sterling Motor. Electric light. Speed 8½ miles. Apply H. H. Jennings Company, 154 Nassau St., New York City, N. Y.

NO. 1991—Cruising power yacht 65' x 14' 3" x 3' 3". Built 1916. Ideal for Southern cruising. Double stateroom. Large saloon. Enclosed bridge deck. 50-54 H. P. Standard Motor. Speed 11 miles. Located in Virginia. Price attractive. Apply H. H. Jennings Company, 154 Nassau St., New York City.

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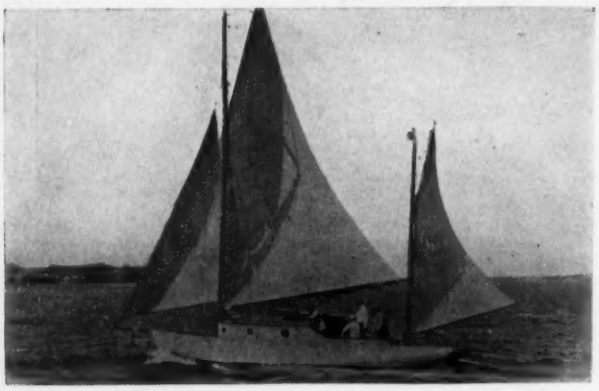
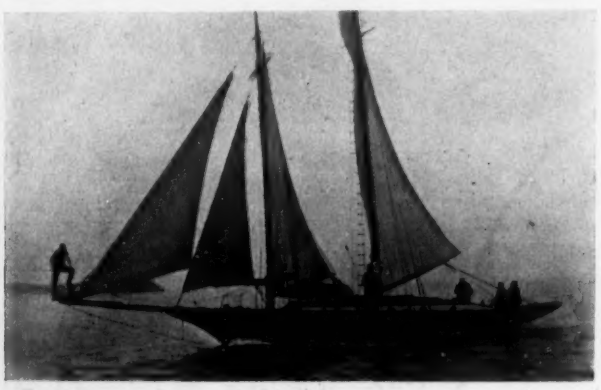
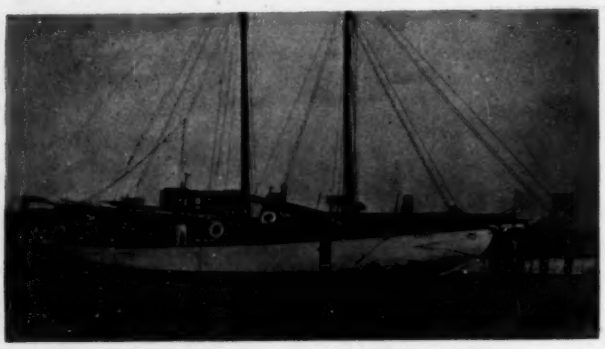


FOR SALE—A trim little yawl with a real turn of speed and unusual cruising accommodations. Length O. A. 39′, L. W. L. 26′, Beam 11′-3″, Draft 3′-10″. Sleeping accommodations, three on transoms and one single stateroom. Full headroom. Toilet. 2 cyl. 10 H. P. Bridgeport engine, new 1920, electric lights, tender. Sails in good condition and full inventory. Price $1200. Inspection at New Bedford. B. T. Dobson, Naval Architect, New Bedford, Mass.



FOR SALE—A smart little schooner, fast and able, one that can be maintained with very low upkeep. Length O. A. 52′, L. W. L. 36′, Beam 14′, Draft 7′. Four real berths in cabin and one single stateroom, two pipe berths forward and toilet room. Full headroom. 12 H. P. engine, new 1919. Inventory complete, including small launch and round bottom tender. Sails in good condition. Price $3500. Inspection at New Bedford. B. T. Dobson, Naval Architect, New Bedford, Mass.



Keel flush deck cruising schooner. 18 H.P. motor. Built 1910. 54′-41′-15′-8′. Herreshoff model, heavy build. Location Great Lakes. Bargain for cash. Address Box 1564, YACHTING, 47 W. 47th Street, New York City.

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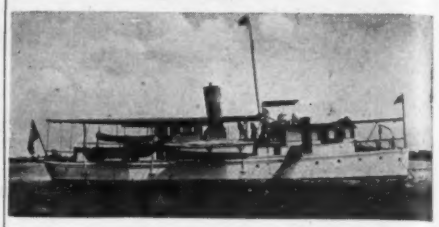

NO.8173—FOR SALE twin screw steam houseboat 80′ x 18′ x3′6″. Four single staterooms and bathroom. Sleeps seven. Hot and cold running water. Boiler retubed 1920, also engine overhauled. Underbody coppered to waterline. Now hauled out, and inspectable Florida. Henry J. Gielow, 25 W. 43rd Street, New York City.

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WANTED— Auxiliary centerboard yawl; 18′ to 21′ water line, 3′ to 4′ draft without centerboard. Give full particulars as to age of hull, sails, spars; send location of boat. Nathan Hale, Union College, Schenectady, N. Y.

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(*Continued from page 279*)

10.4649. *Elsie* rounds Sambro Light Buoy. 10.47.15. *Bluenose* rounds Sambro Light Buoy. Immediately after rounding *Bluenose* luffed up on *Elsie's* weather quarter. Marty Welch made no attempt to prevent this.

10.52. Both indulging in violent luffing match. *Elsie* getting better of it. They are both now sailing two or three points to weather of course.

11.49.28. *Elsie* rounds south east Automatic. 11.49.43. *Bllenose* rounds. *Bluenose* having a slight overlap at the buoy *Elsie* had to give room when they hauled on the wind; this put *Bluenose* in weather position. Both vessels standing on port tack heading up about north-northeast. Now have 6.4 miles almost dead to windward. Although *Bluenose* is to weather *Elsie* has her wind clear and is now drawing out.

Both vessels carrying all light sails, fore and main gaff topsails, staysail and balloon jib. *Bluenose* gained on every windward leg.

2.21.41. *Bluenose* finished. 2.-31.12. *Elsie finished.*

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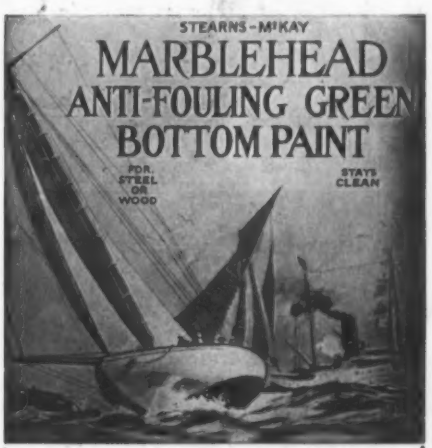

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An Inexpensive Ice-Boat

(*Continued from page 291*)

eter, but may just as well be 30 inches long and ½ inch diameter at the handle. The after end must be fitted to the square on the head of the rudder stock. Wind the end of the tiller with white cotton signal halyard stuff. Forward of the rudder runner is a bumper of 1¾-inch oak.

The masts, for there are two of them, are stepped on the ends of the runner plank. A piece of iron plate 3/16 inch thick and 4½ inches wide is bent to fit, punched and fastened to the mast with ¼-inch stove bolts and to the runner plank with ⅜-inch round head bolts. The heel of the mast is let into the runner plank as shown, and then a slab of 1½-inch oak is fitted around the heel of the mast on the inboard and after sides and fastened to the runner plank. This piece may be tapered off on top, as shown in plan, to make a neater job and save a little weight. Indeed, all corners everywhere should be rounded off and the masts may be made pear-shaped in section, like an aeroplane wing strut. But this is a refinement that is hardly necessary. At the head the masts are secured by a 3-inch strap of 3/16-inch iron bent over the top and about 6 inches long on each leg. Three bolts go through the masthead. The two upper ones are of unequal length, for the forward one is long enough to take the shackle for the head stay. This is an anchor shackle and goes outside of the masthead. The lower bolt takes the shackle of the upper halyard block between the two legs of the mast. A cleat for the backstay is fitted on each mast about 8 feet up and an eye plate for the lower end on the side stringers, 3 feet 6 inches from the after edge of the runner plank. The halyard bridle is of flexible wire 5/16 inch diameter and the halyards are of 1⅛-inch circumference manila bolt rope. The halyard blocks are galvanized iron, for ⅜-inch-diameter rope; main sheet blocks the same. The cleat for the halyard is on the starboard mast and a cleat for the main sheet is on each of the after side stringers. Turnbuckles for the head stay and backstays are, of course, fitted with split pins or lock nuts so they cannot slack up under strain.

The sail should be a couple of numbers heavier than for a yacht sail of equal size, say 6- or 8-ounce duck. It should be practically flat, with hardly any draft in it. Instead of the eyebolt for the tack, you might fit a short traveler fore and aft, so that you can peak the

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yard up more if desired. This will mean also a stout snotter to hold the tack aft.

Smooth up and sandpaper the spars and give them two coats of the best spar varnish. Give the hull three coats of good oil paint—outside or yacht paint, or of spar varnish if bright finish is desired, and then wait for a cold snap and smooth ice. When it comes, go to it, for you must get your sailing when the ice and conditions are right.

Racing On a "Forty"

(*Continued from page 268*)

Just a few miles from the finish the wind hauled a bit more easterly and by trimming our mainsail in a little and letting our spinnaker boom go well forward we ran right past the *Shawara*, though her crew tried all kinds of sail trimming except the right kind to prevent us, and took second place—eliminating *Pampero*. We could not catch *Squaw*. She crossed the finish line at 3:17:40, *Pampero* at 3:19:59, we on *Monsoon* at 3:20:35, *Shawara* at 3:20:56 and *Sally Ann* at 3:21:55.

To go back to my remarks at the beginning of this article. Having sailed in both the old and the new 40-foot classes, I will say that the sport is just as keen and the present fleet of frolicking, fighting "forties" is every bit as good as it was in the old days away back in the 90's when the old "forties" hammered it out in many a hard fought race just as this new class of Herreshoff "forties" is doing today.

How To Build A Model Yacht

(*Continued from page 294*)

applies only to a tiller which has its leverage forward of the rudder post. In this case the action is direct and not crossed. Springs are sometimes used on the tiller in order to insure the rudder being in a forward and aft plane when beating into the wind, and at such times the boat should be balanced with her sails alone in such a way that the beat to windward may be accomplished without the aid of any tiller action whatever. To this end it has been found a good idea to use another mainsheet on a snap hook for beating into the wind, and it would be well to place a similar snap hook on the staysail boom, setting these two sheets, so that the model balances satisfactorily. When desiring to come about for a run, these two sheets may be knocked off with a minimum of elapsed time. The running sheets, having already been set, are naturally in a position to take up the work.

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